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WHATEVER IT TAKES, 365 DAYS A YEAR



Golden Harvest is driven to deliver the ultimate service experience on your farm, all year round. We'll be there to offer insights on your field conditions, listen to your needs and tailor recommendations to meet them exactly. Not just throughout the growing season, but long before planting and way beyond harvest.

Count on us to be relentless about adding value at every stage of your crop's development, from planting to monitoring performance to evaluating results and planning for the following year.





Golden Harvest is dedicated to developing quality products that meet specific farmer needs. Your Seed Advisor will recommend products that combine locally developed genetics with the traits you need, placed to deliver in your real field conditions. All backed by a year-round service experience that yields results.



UNIQUE GENETICS

To help you hit your harvest numbers, Golden Harvest is continually investing in optimizing product performance and bringing you a range of local choices. Our agronomists and R&D teams work closely with your local Seed Advisor to understand the issues you face and help address them with a locally bred and tested corn and soybean lineup that combines elite genetics with the most choice in industry-leading traits. But the real proof is in the field, where our corn and soybean products yielded 55 Top 3 Finishers and 185 Top 10 Finishers in 2019 FIRST Trials.



AGRONOMIC EXPERTISE

Seed Advisors tap into our agronomy team's expertise and leverage the wealth of data in our proprietary E-Luminate® digital platform to more precisely place products for maximum performance in your fields.



TIRELESS SERVICE

Count on your Golden Harvest® Seed Advisor for insights and local expertise that will help you make the right decisions for your crop throughout the current season and help plan for the next. Because it's not just service; it's a commitment to truly understanding you and your fields.



LOCALLY PROVEN CORN WITH INDUSTRYLEADING GENETICS

To create hybrids that deliver in your individual conditions, Golden Harvest breeds and tests our products locally. Over 1,600 local trials ensure that we know what works in your area. Our corn hybrids offer:

- Proprietary germplasm with elite genetics that are proven to perform locally
- Strong agronomics, yield potential and standability
- Premium above- and below-ground insect control with Agrisure Duracade® and Agrisure Viptera® traits
- Opportunities to add to your bottom line with Enogen® Corn or Enogen Feed Corn
- The backing of a team of whose agronomic expertise delivers optimal product placement with performanceoptimizing insights throughout the season

FEATURING 32 TOP 3 FINISHERS AND 112 TOP 10 FINISHERS IN 2019 FIRST TRIALS.¹

'Farmers' Independent Research of Seed Technologies (FIRST). No product recommendation by FIRST is implied. See firstseedtests.com for details.

PROTECT YOUR CORN'S GENETIC YIELD POTENTIAL.

AGRISURE® TRAITS OFFER THE INDUSTRY'S BROADEST CHOICE OF CUTTING-EDGE TRAIT TECHNOLOGY.

✓ Agrisur∈Duracade®

- Features a unique mode of action for strong control of corn rootworm
- Protects root systems for better nutrient and water uptake, helps ensure fuller leaves for increased photosynthesis and maximum grain fill, and results in strong plants that stand all season long
- Provides a new trait rotational option for a healthier crop
- Stacked option with Agrisure Viptera® trait controls 16 damaging above- and below-ground pests, more than any competitive stack
- Delivers a 4.1 bu/A yield advantage over products without Agrisure Duracade*

★ AgrisureViptera

- The industry's most comprehensive, best performing, most complete above-ground insect control
- The only trait that effectively controls western bean cutworm
- Reduces risk of mold and mycotoxin development through control of earfeeding insects
- Delivers a 7.3 bu/A yield advantage under ear-feeding insect pressure**

✓ Agrisure Artesian[®]

- Maximizes yield when it rains and increases yield when it doesn't
- Offers multiple genes for season-long drought protection
- Optimizes plant health through elite genetics that allow plants to manage gaps in rainfall season-long and yield exceptionally well in good conditions
- Delivers nearly 12% higher yields compared to other hybrids in severe and extreme drought²



^{*}Study results from Syngenta field trials in 33 locations

² Source info: 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 assevere and fewer than 50 bu/A as extreme.

CORN CHARACTERISTICS

PRODUCT				TRAIT OFFERS			
		ow Ground with E-Z Refuge	Above Ground Insect Protection with E-Z Refuge	Above/Below Ground Insect Protection	Above Ground Insect Protection	No Insect Protection	No Insect Protection
Harvest eries	≠ Agrisure	∡ Aarisure	Agrisure 3120	Agrisure 3000GT	✓ Agrisure	Agrisure GT	
Golden Harvest Hybrid Series	Duracade	Agrisure 3122	Agrisure Viptera	Agrisure Viptera	Viptera	Agrisure GT/LL	Conventional
G04G36 NEW				3111A NEW			
G05K08	5122A						
G07F23				3111		GT	Conv.
G08D29	5122A		3120A				
G08M20	5122		3120				
G08R52			3220				
G07B39				3111A			
G09A86			3330	3000GT		GT/LL	
G09Y24	5222A		3220A				
G10D21 NEW			3330 NEW				
G10L16	5222A		3330A, 3220A NEW				
G10T63		3122	3120				
G11A33			3220				
G11F16				3111A			
G11V76 NEW	5122 NEW		3120 NEW				
G12J11			3220A				
G12S75 NEW	5122 NEW						
G12U17	5122		3120				
G12W66			3220				
G13H15	5122		3120				
G13M88					3110		
G13Z50	5222		3220				
G14N11	5222						
G14R38		3122	3120			GT	Conv.
G15J91 NEW			3220 NEW				
G15L32	5222 NEW		3330	3000GT			
G16K01				3111		GT	
G18D87				3111		GT	

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.

Ratings are based on interpretation of data gathered by Syngenta and/or observations across areas of adaptation and may change as additional data is gathered.

Seed products with the LibertyLink® (LL) trait are resistant to the herbicide glufosinate ammonium, an alternative to glyphosate in corn, and combine high-yielding genetics with the powerful, non-selective, postemergent weed control of Liberty® herbicide for optimum yield and excellent weed control. LibertyLink®, Liberty® and the Water Droplet logo are registered trademarks of BASF Corporation.











	ATURI ORMA						ONO CTEF	MIC RISTI	cs				СН		CTE		cs			DI	SEA	SE TO	OLEF	RANC	Έ		PRODUCT
Relative Maturity (RM)	GDUs to Silk	GDUs to Black Layer	Emergence	Seedling Vigor	Root Strength	Stalk Strength	Drought	Green Snap	Staygreen	Drydown	Test Weight	Plant Height	Ear Height	Root Type	Leaf Type	Ear Flex	Husk Cover	Cob Color	Gray Leaf Spot	Northern Corn Leaf Blight	Goss's Wilt	Eyespot	Anthracnose Stalk Rot	Fusarium Crown Rot	Common Rust	Southern Rust	Golden Harvest Hybrid Series
104	1320	2550	4	2	2	3	1	3	5	3	4	5	6	М	S-U	SF	L	R	3	3	3	4	5	5	-	5	G04G36 NEW
105	1310	2555	3	4	4	3	1	3	6	3	4	5	6	Р	U	SD	М	R	4	3	4	3	4	5	-	5	G05K08
107	1375	2570	3	3	3	2	2	3	4	3	4	5	5	М	S-U	SF	М	Pi	3	2	4	3	-	3	5	6	G07F23
108	1405	2560	2	3	3	3	1	2	5	4	4	4	5	М	S-U	SF	М	Pi	4	2	3	4	-	4	4	5	G08D29
108	1365	2575	3	3	3	3	3	5	5	4	3	5	5	М	S-U	SF	L	R	3	3	4	4	-	5	7	5	G08M20
108	1370	2580	3	3	2	2	2	4	4	4	4	5	5	М	U	SF	М	R	5	3	4	-	-	5	-	-	G08R52
109	1375	2570	4	2	5	4	1	4	4	5	4	3	4	М	Р	SF	М	Pi	5	4	4	3	4	4	-	6	G07B39
109	1385	2580	3	2	3	2	3	5	4	4	4	3	4	М	S-U	SD	М	Pi	2	5	4	5	-	4	5	4	G09A86
109	1420	2570	3	3	4	4	1	3	5	4	4	5	3	М	S-U	SF	M	R	5	2	4	3	-	5	-	5	G09Y24
110	1410	2570	3	2	3	3	3	5	3	4	4	3	2	M	S-U	SD	S	Pi	2	2	3	-	2	4	3	4	G10D21 NEW
110	1395	2620	2	3	4	4	1	4	5	2	4	5	6	M	S-U	SF	M	R	4	6	3	3	-	4	7	4	G10L16
110	1405	2580	2	2	4	4	2	4	3	2	2	2	3	M	U	SF	M	R	3	4	3	5	-	2	4	3	G10T63
111	1435 1430	2600 2590	4	4	2	2	2	3	2	3	3	5	4	M M	P P	SF SF	M	R	3	3	5 5	2	-	4 3	3	3	G11A33 G11F16
111	1430	2600	3	3	3	2	2	3	4	3	5	5 4	5 6	F	U	SF	M L	R Pi	4	3	6	2	3	3	7	4	G11V76 NEW
112	1415	2600	2	2	4	4	1	4	2	3	2	3	2	F	U	SF	М	R	3	4	3	4	-	4	3	3	G12J11
112	1430	2630	4	3	3	2	3	5	2	4	4	2	4	М	U	SF	M	R	3	3	3	-	3	3	7	4	G12S75 NEW
112	1425	2620	3	3	4	2	4	2	2	2	4	3	3	M	S-U	SF	М	R	4	3	5	_	-	2	-	_	G12U17
112	1425	2620	4	3	3	2	4	2	2	2	2	2	2	М	S-U	SF	М	W	4	4	3	4	_	3	3	4	G12W66
113	1420	2640	3	4	3	2	2	3	3	3	4	3	3	М	U	SD	М	R	3	4	3	_	_	2	-		G13H15
113	1430	2680	3	3	2	3	4	3	3	2	4	5	4	М	S-U	SD	М	R	3	3	3	5	_	3	4	4	G13M88
113	1435	2650	2	2	2	4	3	3	3	2	4	4	4	М	S-U	SD	М	R	4	3	3	4	-	4	7	5	G13Z50
114	1425	2660	2	2	2	4	3	2	3	3	5	3	2	М	U	SF	М	Pi	5	5	5	3	-	4	7	5	G14N11
114	1435	2630	3	3	2	3	3	3	4	3	3	3	2	М	U	SD	М	R	5	4	4	3	4	3	3	4	G14R38
115	1455	2665	4	5	2	4	3	4	4	4	3	3	5	М	U	SF	L	W	4	2	5	-	2	4	7	4	G15J91 NEW
115	1455	2645	2	3	3	4	4	3	2	4	2	4	5	М	S-U	SF	L	R	3	4	4	3	-	4	7	5	G15L32
116	1465	2690	4	3	5	3	2	3	3	2	4	4	4	М	Р	F	М	Pi	5	4	3	5	3	4	6	5	G16K01
118	1480	2700	4	4	4	3	3	3	2	3	2	2	3	М	S-U	SF	L	R	3	3	4	5	-	4	3	3	G18D87

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

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

Husk Cover S = Short

M = Medium

L = Long

Cob Color

R = Red

Pi = Pink W = White

Disease Tolerance

1 = High

9 = Low - = Not available

Drought

Agrisure Artesian water-optimized hybrid. Artesian

RM: 108

EXCELLENT STALKS AND ROOTS FOR SEASON-LONG STANDABILITY

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

Rating Emergence	9	7	5	3	BEST 1
Root Strength	• 0		•	•	
Stalk Strength	• •	0	0	•	
Staygreen	• 0	•	•		
Drydown		•	•	0	
Drought Season-long Protection	•	•	•	•	• •

G08D29-5122A E-Z Refuge Brand G08D29-3120A E-Z Refuge Brand

RM: 108

EXCITING COMBINATION OF HIGH YIELDS AND SOLID AGRONOMICS

- Solid late-season stalks
- Great test weight and grain quality
- Adapted to most soil types



G08M20-5122 E-Z Refuge Brand G08M20-3120 E-Z Refuge Brand E108M2-5122 E-Z Refuge Brand

RM: 109

TOP-END YIELD WITH SOUND AGRONOMICS

- Excellent stalks and strong roots for season-long standability
- Outstanding choice for variable soils provides consistent performance
- Strong protection against Gray Leaf Spot to minimize risk



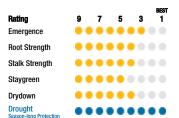
G09A86-3330 E-Z Refuge Brand G09A86-3000GT Brand G09A86-GT/LL Brand

G09Y24 Artesian

RM: 109

EXCITING GENETICS WITH AGRISURE ARTESIAN TECHNOLOGY

- Maximizes yield when it rains; increases yield when it doesn't
- Population flexibility across all environments
- Top-end yield potential with stability when conditions are tough

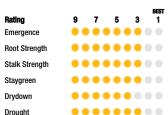


G09Y24-5222A E-Z Refuge Brand G09Y24-3220A E-Z Refuge Brand E109Y2-5122A E-Z Refuge Brand

NEW // RM: 110

TOP-END YIELDS WITH OUTSTANDING ROOTS AND STALKS FOR **SEASON-LONG STANDABILITY**

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

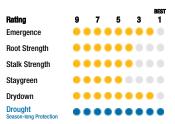


G10D21-3330 E-Z Refuge Brand NEW

RM: 110

INDUSTRY-LEADING YIELD PERFORMANCE ACROSS ALL ACRES

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

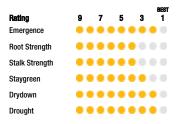


G10L16-5222A E-Z Refuge Brand G10L16-3330A E-Z Refuge Brand G10L16-3220A E-Z Refuge Brand MEM G10L16-A Brand (Conv.) NEW

RM: 110

STRONG EMERGENCE AND EARLY VIGOR ALLOWS EARLY PLANTING

- Excellent top-end yield and broadly adapted
- Strong root
- Moderate plant stature for residue management



G10T63-3122 E-Z Refuge Brand G10T63-3120 E-Z Refuge Brand

RM: 111

MODERATE PLANT HEIGHT WITH CONSISTENT YIELDS

- Solid stalks and roots for season-long standability
- Outstanding staygreen
- Great drydown and consistent test weight

Rating	9	7	5	3	BEST
Emergence	• 0	•	•	0	
Root Strength	• 0	•	•	•	0
Stalk Strength	• 0	•	•	•	0
Staygreen	• 0	•	•	•	0
Drydown	• 0	•	•	•	
Drought					0

G11A33-3220 E-Z Refuge Brand E111A3-5122 E-Z Refuge Brand

G11F16 Artesian

- Maximizes yield when it rains; increases yield when it doesn't
- Proven yield across multiple soil types and environments for stable performance
- Excellent root and stalk strength for ease of harvest

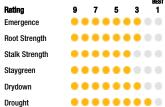


G11F16-3111A Brand

NEW // 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 stressful environments



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

TOP YIELD WITH AGRISURE ARTESIAN TECHNOLOGY FOR CENTRAL AND **EASTERN CORN BELT**

- Maximizes yield when it rains; increases yield when it doesn't
- Strong emergence and seedling vigor for early planting
- Proven performance



G12J11-3220A E-Z Refuge Brand E112J1-3011A Brand

NEW // RM: 112

OUTSTANDING ROOTS AND STALKS FOR SEASON-LONG STANDABILITY

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



G12S75-5122 E-Z Refuge Brand NEW

G12U17

RM: 112

EXCELLENT STALKS FOR SEASON-LONG STANDABILITY

- Exceptional performance in poorly drained soils
- Outstanding late season plant health and intactness
- Excellent drydown for an early harvest option

Rating Emergence	9 7	5	BEST 3 1	
Root Strength	• • • •	••		
Stalk Strength	••••	•••	• • •	
Staygreen	••••	• •	• • •	
Drydown	••••	• •	• • •	
Drought		•		

G12U17-5122 E-Z Refuge Brand G12U17-3120 E-Z Refuge Brand G12W66

RM: 112

VERY STRONG AGRONOMIC PACKAGE PROVIDES SUPERB PERFORMANCE

- Outstanding stalks and strong roots for late-season standability
- Excellent grain quality and test weight
- Consistent performance across all soil types



G12W66-3220 E-Z Refuge Brand

G13H15

RM: 113

BROADLY ADAPTED HYBRID FOR EXCELLENT PERFORMANCE ACROSS YIELD ENVIRONMENTS

Very strong stalks for season-long standability

Outstanding late-season plant health stalk strength and intactness

Strong performance under drought conditions

 Rating
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G13H15-5122 E-Z Refuge Brand G13H15-3120 E-Z Refuge Brand G13M88

RM: 113

SOLID AGRONOMICS WITH YIELD PUNCH

- Moderate plant structure with dependable stalks and roots
- Strong foliar disease package to maximize performance
- Distinguishing kernel depth with drydown



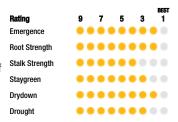
G13M88-3110 Brand E113M8-5122 E-Z Refuge Brand

G13Z50

RM: 113

EXCELLENT EMERGENCE AND SOLID EARLY VIGOR

- Good disease tolerance
- Excellent drydown
- Performs well under a wide range of populations



G13Z50-5222 E-Z Refuge Brand G13Z50-3220 E-Z Refuge Brand E113Z5-5122 E-Z Refuge Brand G14N11

RM: 114

EXCELLENT TOP-END YIELD POTENTIAL WITH BROAD ADAPTABILITY

- Very strong emergence and vigor allow for an early plant option
- Outstanding root strength for season-long standability
- Moderate plant stature for residue management



G14N11-5222 E-Z Refuge Brand

G14R38

RM: 114

OUTSTANDING YIELD PERFORMANCE WITH AN EXCELLENT AGRONOMIC PACKAGE

- Strong emergence and seedling vigor
- Superb root strength and proven stalk strength
- Excellent choice for continuous corn acres

					BEST
Rating	9	7	5	3	1
Emergence	•	•		•	
Root Strength	•	0	•	•	•
Stalk Strength	•	0	•	•	
Staygreen	•	•	•	0	
Drydown	•	•	•	•	
Drought				•	

G14R38-3122 E-Z Refuge Brand G14R38-3120 E-Z Refuge Brand G14R38-GT Brand G14R38 Brand (CONV.) G15J91

NEW // RM: 115

OUTSTANDING ROOTS AND ABOVE-AVERAGE 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



G15J91-3220 E-Z Refuge Brand MEW

G15L32

RM: 115

STRONG AGRONOMICS WITH STABLE YIELD PERFORMANCE

- Population driven for top-end performance
- Very good root and stalk strength for harvest flexibility
 stalk strength staygreen
- Dependable staygreen to help maximize yield potential

 Rating
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 Emergence
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G15L32-5222 E-Z Refuge Brand MEW G15L32-3330 E-Z Refuge Brand G15L32-3000GT Brand

G16K01

RM: 116

BROADLY ADAPTED PRODUCT WITH SUPERIOR YIELD POTENTIAL

- Well adapted to drought-prone soils
- Yields well 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 0 0 0 0 0 0 1
Root Strength 0 0 0 0 0 0 0 0
Stalk Strength 0 0 0 0 0 0 0 0
Drought 0 0 0 0 0 0 0 0

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

G18D87

RM: 118

BROADLY ADAPTED WITH A COMPLETE AGRONOMIC PACKAGE

- Strong choice for highly productive irrigated and dryland systems
- Tall plant type with good stalks for improved standability
- Great plant health and staygreen promotes late-season intactness

 Rating
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 Emergence
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G18D87-3111 Brand G18D87-GT Brand E118D8-3000GT Brand

CORN AGRONOMIC MANAGEMENT

PRODUC	СТ			AGI	RONON	ИС МА	NAGEN	MENT A	ND PLA	CEME	NT TRA	AITS			Е	ND-US	E TRAI	rs
	€		See	eding R	ate % <i>I</i>	Adjustn	nent				tation t							
Golden Harvest Hybrid Series	Relative Maturity (RM)	-20%	-10%	%0	%0+	+20%	Root Strength	Stalk Strength	Corn-on-Corn	Drought Prone	High pH	Highly Productive	Variable	Poorly Drained	Starch	Protein	ĪŌ	Feed to Gain
G04G36 NEW	104	G	G	В	G	G	2	3		В	F	G	G	G	-		F	В
G05K08	105	G	В	В	G	G	4	3	G	В	G	В	В	G	G	G	В	В
G07F23	107	G	G	В	G	G	3	2	G	В	Р	В	В	G	G		В	В
G08D29	108	G	G	В	G	G	3	3	В	В	F	В	В	G	F	G	В	G
G08M20	108	В	В	В	G		3	3	G	G	G	В	В	F	В	F	G	G
G08R52	108	G	G	В	G	G	2	2	G	В	F		G	G	В	G	Р	G
G07B39	109	G	В	В	G	G	5	4	G	В	F	G	В	F	G		В	G
G09A86	109		G	В	В	В	3	2	G	G	F	В	В	В	F	G	G	В
G09Y24	109	G	В	В	G		4	4		В	Р	В	В	G		G	В	F
G10D21 NEW	110	G	G	В	G	G	3	3	G	F	F	G	G	G	G	G	В	G
G10L16	110	G	G	В	G	G	4	4	В	В	F	В	G	G	В	F		G
G10T63	110	G	В	В	G	G	4	4	G	G	Р	В	В	Р	G		В	G
G11A33	111	G	G	В	G	G	2	2	В	G	Р	G	В	G	G	G	В	G
G11F16	111	G	G	В	В	G	2	2	G	В	Р	В	В	G	G	F	G	G
G11V76 NEW	111	G	G	В	G	G	3	4	G	G	G	G	G	G	-	В	G	G
G12J11	112	G	G	В	G	G	4	4	G	В	Р	В	В	F	F	G	В	F
G12S75 NEW	112	G	G	В	G	G	3	2	В	F		В	В	В	-	В	F	G
G12U17	112	G	G	В	G	G	4	2	F	F	G	В	G	В	В	В	F	G
G12W66	112	G	G	В	G	G	3	2	В	F	G	В	G	G	G		G	G
G13H15	113		G	В	G		3	2	G	G		В	В	В	F	G	G	G
G13M88	113	G	G	В	G	G	2	3	G	G	G	В	G	G	F	В	В	G
G13Z50	113	G	G	В	В	В	2	4	G	G	G	В	В	В	G	G	F	G
G14N11	114	G	В	В	G	F	2	4	В	G	G	В	G	В	В	В	F	В
G14R38	114	G	G	В	В	В	2	3	В	G		В	В	В	G	F	G	В
G15J91 NEW	115	G	В	В	G		2	4		G	G	В	В	В	-	В	В	G
G15L32	115	G	G	В	G	G	3	4	G	G	В	В	G	G	В	F		G
G16K01	116		G	В	В	G	5	3	G	В	Р	В	В	F			G	G
G18D87	118	F	G	G	В	В	4	3	В	G	G	В	G	G	G	В	F	Р

Rating Scale

- 1 = Best
- 9 = Worst
- = Not available

Score Interpretation

- H = 🛘 Choice
- = Choice
- t = Average to Slightly Below Average
- 6 = Not Recommended
- = 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.

Corn Population Response Factors

This annual study aids farmers' understanding of how yield environment, grain price, seed cost and hybrid population response influence seeding rate recommendations. Information from this study is useful in determining the optimum planting population for each hybrid and field.

Influence of Yield Environment and Commodity Price on Optimum Seeding Rate

YIELD ENVIRONMENT (BU/A)	HIGHEST YIELDING SEEDING RATE (SEEDS/A)	ОРТІМ	MUM SEEDING RAT (SEED	E (SEEDS/A) BY CO COST = \$200/80K		(\$/BU)
		\$3.00	\$3.50	\$4.00	\$4.50	\$5.00
280	40,200	36,600	37,100	37,500	37,700	38,000
240	38,500	34,100	34,700	35,100	35,500	35,800
200	36,400	31,000	31,700	32,300	32,700	33,100
160	33,800	26,900	27,700	28,400	29,000	29,400
120	29,700	20,900	21,900	22,700	23,400	23,900

General Interpretation of Hybrid Response to Management/Placement Situations and End-Use Traits

The Agronomy in Action Research program analyzes the agronomic characteristics of Golden Harvest products to aid in placement and usage in real-world farm situations. With Agronomy in Action locations positioned throughout the Corn Belt, the annual research answers the "why", "how" and "where" questions of B management practices for our products. Uniform testing methodology ensures that research results are a reliable prediction of the response farmers will see in their fields. By conducting this annual research and compiling across multiple years, Golden Harvest provides tremendous insight into specific management tactics for each product—insight farmers can use to maximize the potential for profit on their farms. The Agronomic Management chart lists hybrid performance characteristics collected from results of these studies.

Seeding Rate % Adjustment: After determining the B corn seeding rate for your field (or zones within field) from the chart above, consider fine-tuning seeding rates with hybrid-specific response knowledge. The seeding rate adjustment chart highlights different hybrids' ability to be planted at seeding rates greater than or less than the normal recommended rate based on the economic response from agronomic trialing. Root and Stalk strength ratings are also provided for additional knowledge of hybrid agronomic fit for planting at increased seeding rates.

Adaptation to Soil Types/Yield Environments: Ratings and soil type classifications are based on interpretation of studies conducted by Syngenta.

Corn-on-Corn: Two key criteria are used to determine corn-on-corn crop rotation hybrid ratings: 1) Corn-on-corn yield retention data, calculated by comparing each hybrid's yield in a corn-on-corn rotation versus a corn-on-soybean rotation, which was then compared to the average corn-on-corn yield retention of all hybrids tested, and 2) Hybrid agronomic characteristics; characteristics include early season vigor, root characteristics and disease tolerance.

High pH Performance: Ratings represent an assessment of stand establishment, chlorosis severity and yield performance.

End-Use Traits: The Corn Hybrid Grain End-Use Ratings provide information that can help farmers who produce corn for livestock, the ethanol industry or other grain end uses where grain quality can be just as important as grain yield. These Corn Hybrid Grain End-Use Ratings are supported by collecting grain samples from internal company trials, which are sent to an independent laboratory for protein, oil and starch analysis.

Feed to Gain Response: Feed to gain is the average pounds of feed needed for each pound of animal gain. Lower feed to gain values are more desirable because animals consume less feed to produce the same amount of weight gain, potentially resulting in less feed input cost. The Corn Hybrid Beef Feed to Gain Ratings are provided to help farmers produce the B corn for livestock rations. These Corn Hybrid Beef Feed to Gain Ratings are supported by collecting grain samples from internal company trials, which are sent to an independent laboratory to analyze for kernel density/hardness (grams/cubic centimeter) and kernel weight per 1000 kernels. Individual hybrid ratings illustrate which hybrids provide the B feed to gain response.

"GOLDEN HARVEST LOOKS FORWARD TO WORKING WITH YOU TO BUILD ON THE LEGACY OF OUR HISTORIC BRAND. WE PROMISE TO ALWAYS PUT YOUR NEEDS FIRST, WHILE BRINGING YOU GENETICS, AGRONOMY AND SERVICE PAIRED WITH NEW SOLUTIONS LIKE E-LUMINATE AND GAME PLAN."

Dave Young

Head, Golden Harvest Marketing



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:

- Testing soil to monitor fertility issues as a result of manure applications
- Planting population recommendations and planting timing considerations
- Harvest timing to ensure optimal moisture and higher quality silage
- How Enogen® Feed corn hybrids may increase your potential return on investment

CORN SILAGE HYBRID SELECTION

Silage quality and yield scores are based on actual tonnage—the silage analysis values were compared to hybrids of similar maturity.

PRODU	СТ				NOMIC ERIST				EASE RANCE				AGRO	NOM	C RES	SEARC	CH RA	TINGS	;		
	(RM)												(%)	€				Feed	Effec	t On*	
Golden Harvest Hybrid Series	Relative Maturity (RM)	Emergence	Root Strength	Drought	Staygreen	Plant Height	Ear Height	Gray Leaf Spot	Goss's Wilt	Yield (Ton/A)	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/A)*	Beef (lbs/Ton)*	Beef (lbs/A)*
G05K08	105	3	4	1	6	5	6	4	4	G	В	В	G	В	В	G	G	G	G	G	G
G07F23	107	3	3	2	4	5	5	3	4	В	G	G	G	G	G	В	В	В	В	В	В
G08D29	108	2	3	1	5	4	5	4	3	G	G	F	G	G	В	G	G	G		G	
G08M20	108	3	3	3	5	5	5	3	4	G	В	В	G	В	В	F	G	F	F	F	F
G07B39	109	4	5	1	4	3	4	5	4	В	G	В	В	G	В	В	В	В	В	В	В
G09A86	109	3	3	3	4	3	4	2	4	В	В	G	F	В	G	G	G	G	G	G	В
G09Y24	109	3	4	1	5	5	3	5	4	G	G	G	В	G	G	В	В	В	G	В	G
G10L16	110	2	4	1	5	5	6	4	3	F	G	В	G	В	В	G	G	G	F	G	F
G10T63	110	2	4	2	3	2	3	3	3	В	F	F	F	F	В	G	G	G	В	G	В
G11A33	111	4	2	2	2	5	4	3	5	Р	G	В	В	В	В	G	В	G		G	
G11F16	111	4	2	1	2	5	5	4	5		G	G	G	В	F		G	G		G	F
G12J11	112	2	4	1	2	3	2	3	3	G	G	F	F	G	G	G	G	G	G	G	G
G12U17	112	3	4	4	2	3	3	4	5	G	G	В	В	В	F	G	G	G	G	G	G
G12W66	112	4	3	4	2	2	2	4	3	G		G		G	В	G	G	G	G	G	G
G13H15	113	3	3	2	3	3	3	3	3	В		G	F	G	F	G	G	G	В	G	В
G13M88	113	3	2	4	3	5	4	3	3			В	G	В	G	G				G	
G13Z50	113	2	2	3	3	4	4	4	3	F		G	G	G	F	G	G	G	F	G	F
G14N11	114	2	2	3	3	3	2	5	5	В		В	G	В	G	G	G	G	В	G	В
G14R38	114	3	2	3	4	3	2	5	4	G		В	G	В	В	В	В	В	В	В	В
G15L32	115	2	3	4	2	4	5	3	4	В	G	G	G	В	G	G	G	G	G	G	G
G16K01	116	4	5	2	3	4	4	5	3	G	F	G	G	G	G	В	В	В	G	В	G B
G18D87	118	4	4	3	2	2	3	3	4	В	В	G	В	G	G	В	В	В	В	В	В

NOTE: Hybrid characteristics such as staygreen and drought stress tolerance are also important to consider when selecting hybrids for silage. Digestibility ratings are based on NIR and in-vitro digestibility analysis. Milk performance estimates generated from University of Wisconsin equations. Comparisons should only be made among hybrids within a maturity group. Although actual silage yield and quality analysis of a hybrid will vary with environment, the relative ranking of a hybrid will be similar. These ratings are a relative performance guide. Conduct a laboratory test to determine actual silage quality when balancing a feed ration.

Rating Scale

1 = Best

9 = Worst

- = Not available

Plant Height

1 = Tall

9 = Short

Ear Height

1 = High9 = Low

Ratings Key B = Best G = Good

= Fair

P = Poor - = Not available

Drought:

Agrisure Artesian water-optimized hybrid.

*NOTE: These ratings should not be used to estimate actual production per animal, but instead they should be used to determine relative overall silage quality and yield of each hybrid.

**Milk/A: Combining yield and quality into a single term, https://fyi.uwex.edu/forage/files/2016/11/Milk-2016-Combining-Yield-and-Quality-into-a-Single-Term-2.pdf

Using This Chart

Yield: Calculated on a per-acre basis and adjusted to standard moisture.

Crude Protein (CP): Indicates the percent content of feed component relative to other hybrids.

Neutral Detergent Fiber (NDF 48 hr): Measure of the indigestible and slowly digestible components of the silage.

Neutral Detergent Fiber Digestibility 48 Hour (NDF Dig 48 hr): Estimates the ruminant digestibility of the NDF fraction.

Starch: Indicates the percent content of feed component.

Fat: Indicates the percent of feed component that is fat.

Total Digestible Nutrients (TDN): Sum of the digestibility of different nutrients.

Net Energy Lactation (NEL): Feed effect on net energy for lactating cows based on acid detergent fiber (ADF).

Milk/Ton: An estimate of forage quality driven by starch content, starch digestibility and NDF; Milk/A combines the estimate of forage quality (Milk/Ton) and yield (Tons/A) into a single term.*3

Beef/Ton: A proprietary estimate of forage quality driven by TDN; Beef/A combines the estimate of forage quality (Beef/Ton) and yield (Tons/A) into a single term.



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



ADDED VALUE IN BEEF AND DAIRY

- Enogen Feed corn hybrids in livestock production has 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)¹
- Enogen Feed corn hybrids improve starch utilization, resulting in more available energy for your herd
- Enogen Feed corn hybrids may be harvested as silage, grain or high-moisture corn, allowing for greater flexibility and ease of use with minimized management needs, as compared to alternative silage-specific hybrids for beef or dairy operations
- Farm-proven yields, equal to or better than non-Enogen
 Feed hybrids²

ADDED VALUE IN ETHANOL PRODUCTION

- Enogen corn enables farmers to produce highly desirable corn for ethanol plants
- 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 at sale for potential increased return on investment

¹University of Nebraska-Lincoln Research Studies, 2013-2017; Kansas State University Research Study, 2017 ²Syngenta production data 2012-2017

ENOGEN HYBRID CHARACTERISTICS

PRODUCT	TRAIT O	FFERS*		IATURI ORMA			(A AHC			OMIC RIST		5		C	СНА		LAN		ΓICS	5		DIS	EAS	EΤ	OLE	RAN	NCE	
Enogen Hybrid Series	Above/Below Ground Insect Protection E-Z Refuge AgrisureDuracade	Above/Below Ground Insect Protection	Relative Maturity (RM)	GDUs to Silk	GDUs to Black Layer	Emergence	Seedling Vigor	Root Strength	Stalk Strength	Drought	Green Snap	Staygreen	Drydown	Test Weight	Plant Height	Ear Height	Root Type	Leaf Type	Ear Flex	Husk Cover	Cob Color	Gray Leaf Spot	Northern Corn Leaf Blight	Goss's Wilt	Eyespot	Anthracnose Stalk Rot	Fusarium Crown Rot	Common Rust	Southern Rust
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	3	-	5	-	5
E111A3	5122		111	1435	2600	4	4	2	2	2	3	2	3	3	5	4	М	Р	SF	М	R	3	3	5	2	-	4	3	3
E112J1		3011A	112	1415	2600	2	2	4	4	1	4	2	3	2	3	2	F	U	SF	М	R	3	4	3	4	-	4	3	3
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	5	-	3	4	4
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	4	-	4	7	5
E116K4		3000GT	116	1465	2690	4	3	5	3	2	3	3	2	4	4	4	М	Р	F	М	Pi	5	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	5	-	4	3	3

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

Root Type

P = Penetrating M = Modified F = Fibrous

Leaf Type

U = UprightS-U = Semi-Upright

P = Pendulum

Ear Flex

F = FlexSF = Semi-Flex SD = Semi-Determinate

D = Determinate

Husk Cover

S = ShortM = Medium

L = Long

Drought:

Agrisure Artesian water-optimized hybrid.

Disease Tolerance

1 = High 9 = Low

Cob Color

R = Red

Pi = Pink

W = White

- = Not available

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.

		HEKBIGIDE	TULEKANGE
	EVT TYPE	GLYPHOSATE	GLUFOSINATE
Enogen Hybrids with Agrisure Duracade® 5122 trait stack	EZT1	x	X
Ellogen nybrius with Agrisure Duracaue* 5122 trait Stack	EZT0	x	
	EVT5.1	X	X
Enogen Hybrids with Agrisure® 3000GT trait stack or	EVT3	x	
Agrisure Artesian® 3011A trait stack	EVTL	x	x
	No EVT	x	x

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.

Seed products with the LibertyLink® (LL) trait are resistant to the herbicide glufosinate ammonium, an alternative to glyphosate in corn, and combine high-yielding genetics with the powerful, non-selective, postemergent weed control of Liberty® herbicide for optimum yield and excellent weed control.









EXPERIENCE THE ENOGEN EFFECT

Scan and hear about the Engoen advantage in dairy from a university expert.

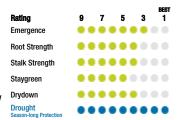


E109Y2 Artesian

RM: 109

EXCITING GENETICS WITH AGRISURE ARTESIAN TECHNOLOGY

- Maximizes yield when it rains; increases yield when it doesn't
- Population flexibility across all environments
- Top-end yield potential with stability when conditions are tough



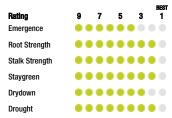
E109Y2-5122A E-Z Refuge Brand

E111A3

RM: 111

MODERATE PLANT HEIGHT WITH CONSISTENT YIELDS

- Solid stalks and roots for season-long standability
- Outstanding staygreen
- Great drydown and consistent test weight



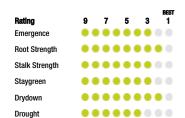
E111A3-5122 E-Z Refuge Brand

E113M8

RM: 113

SOLID AGRONOMICS WITH YIELD PUNCH

- Moderate plant structure with dependable stalks and roots
- Strong foliar disease package to maximize performance
- Distinguishing kernel depth with drydown



E113M8-5122 E-Z Refuge Brand

E113Z5

RM: 113

EXCELLENT EMERGENCE AND SOLID EARLY VIGOR

- Good disease tolerance
- Excellent drydown
- Performs well under a wide range of populations



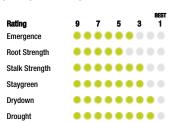
E113Z5-5122 E-Z Refuge Brand

E116K4

RM: 116

BROADLY ADAPTED PRODUCT WITH SUPERIOR YIELD POTENTIAL

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



E116K4-3000GT Brand

E118D8

RM: 118

BROADLY ADAPTED WITH A COMPLETE AGRONOMIC PACKAGE

- Strong choice for highly productive irrigated and dryland systems
- Tall plant type with good stalks for improved standability
- Great plant health and staygreen promotes late-season intactness



E118D8-3000GT Brand

ENOGEN HYBRID AGRONOMIC MANAGEMENT

PRODUC	т		AGRONOMIC MANAGEMENT AND PLACEMENT TRAITS Seeding Rate % Adjustment Adaptation to Soil Types/Yield Environment Souly Drained Adaptation to Soil Types/Yield Environment Adaptation to Soil Types/Yield Environment By Strength Productive ariable ariabl														RAITS
			Se	eding R	ate % A	djustm	ent		Adapta	tion to s	Soil Typ	es/Yield	l Enviro	nments			
Enogen Hybrid Series	Relative Maturity (RM)	-20%	-10%	%0	+10%	+20%	Root Strength	Stalk Strength	Corn-on-Corn	Drought Prone	High pH	Highly Productive	Variable	Poorly Drained	Starch	Protein	ŌĪĪ
E109Y2	109	G	В	В	G	F	4	4	F	В	Р	В	В	G		G	В
E111A3	111	G	G	В	G	G	2	2	В	G	Р	G	В	G	G	G	В
E112J1	112	G	G	В	G	G	4	4	G	В	Р	В	В	F		G	В
E113M8	113	G	G	В	G	G	2	3	G	G	G	В	G	G		В	В
E113Z5	113	G	G	В	В	В	2	4	G	G	G	В	В	В	G	G	F
E116K4	116		G	В	В	G	5	3	G	В	Р	В	В	F		F	G
E118D8	118		G	G	В	В	4	3	В	G	G	В	G	G	G	В	F

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. Agronomy ratings are relative based on other hybrids within the same maturity group.

Corn Population Response Factors

This annual study aids farmers' understanding of how yield environment, grain price, seed cost and hybrid population response influence seeding rate recommendations. Information from this study is useful in determining the optimum planting population for each hybrid and field.

Influence of Yield Environment and Commodity Price on Optimum Seeding Rate

YIELD ENVIRONMENT (BU/A)	HIGHEST YIELDING SEEDING RATE (SEEDS/A)	ОРТІІ	OPTIMUM SEEDING RATE (SEEDS/A) BY COMMODITY PRICE (\$/BU) (SEED COST = \$200/80K UNIT)									
		\$3.00	\$3.50	\$4.00	\$4.50	\$5.00						
280	40,200	36,600	37,100	37,500	37,700	38,000						
240	38,500	34,100	34,700	35,100	35,500	35,800						
200	36,400	31,000	31,700	32,300	32,700	33,100						
160	33,800	26,900	27,700	28,400	29,000	29,400						
120	29,700	20,900	21,900	22,700	23,400	23,900						

General Interpretation of Hybrid Response to Management/Placement Situations and End-Use Traits

Seeding Rate % Adjustment: After determining the B corn seeding rate for your field (or zones within field) from the chart above, consider fine-tuning seeding rates with hybrid specific response knowledge. The seeding rate adjustment chart highlights different hybrids ability to be planted at seeding rates greater than or less than the normal recommended rate based on the economic response from agronomic trialing. Root and stalk strength ratings are also provided for additional knowledge of hybrid agronomic fit for planting at increased seeding rates.

Adaptation to Soil Types/Yield Environments: Ratings and soil type classifications are based on interpretation of studies conducted by Syngenta.

Continuous Corn Agronomic Characteristics: Favorable ratings in this column indicate hybrids containing multiple agronomic phenotypic traits deemed important

for fields where corn is being cultivated for consecutive years. Ratings are weighted based on the following individual hybrid characteristics: yield, emergence strength, early vigor, root and stalk strength, staygreen and foliar disease tolerance.

High pH Performance: Ratings represent an assessment of stand establishment, chlorosis severity and yield performance.

End-Use Traits: Ratings indicate end-use suitability based on the level of each grain quality characteristic.



SOYBEANS WITH PROVEN YIELD POTENTIAL AND INDUSTRY-LEADING CHOICE WEED CONTROL OPTIONS.

Golden Harvest Soybeans are recognized for top-end yield potential with the broadest choice of trait packages. Nearly 900 local trials help ensure that we know what works in your area. Backed with locally knowledgeable Seed Advisors you can trust to select and place the right products for your conditions, our soybean varieties offer:

PROVEN PERFORMANCE

- Industry-leading genetics in locally bred and tested varieties for proven yield
- 23 Top 3 Finishers and 73 Top 10 Finishers in 2019 FIRST Trials¹

STRONG DEFENSIVE AGRONOMICS

 Excellent tolerance to damaging pests and diseases such as Soybean Cyst Nematode, Sudden Death Syndrome, Iron Deficiency Chlorosis and Phytophthora root rot

'Farmers' Independent Research of Seed Technologies (FIRST). No product recommendation by FIRST is implied. See firstseedtests.com for details.

BROADEST CHOICE OF HERBICIDE TOLERANCE TRAITS FOR SUPERIOR WEED CONTROL.



Enlist E3® Soybeans provide yield potential and agronomics and offer superior application flexibility and tank mix options to manage resistant weeds.



Roundup Ready 2 Xtend® Soybeans deliver a full portfolio of proven yield performance with defensive trait options.



LibertyLink® GT27™ Soybeans are known for yield potential and agronomics and allow for in-season glufosinate and glyphosate applications.



SOYBEAN CHARACTERISTICS

PRO	ODUCT							Α	GRON	ОМІС	/PLAN	NT CH	ARACT	reris	TICS*	ŧ					
		(W		40						_			>	-			n to S			Herb	oicide
Golden Harvest Soybean Brands	Herbicide Tolerant Trait	Relative Maturity (RM)	Emergence	Canopy/Plant Type	Plant Height	Standability	Narrow Row	Wide Row	Flower Color	Pubescence Color	Pod Color	Hilum Color	Chloride Sensitivity	Green Stem Rating	Drought Prone	eld E Hd HgiH	Highly Productive	Variable	Poorly Drained	Sulfentrazone	Metribuzin
GH2818E3	E3	2.8	2	М	М	3	1	1	WH	GR	TN	BF	INC	2	В	F	В	В	G	G	В
GH2981X	RR2X	2.9	2	MB	М	3	1	1	PUR	LTW	BR	BL	INC	2	G	G	В	В	G	G	В
GH3042E3	E3	3.0	3	MB	М	3	2	1	PUR	GR	TN	IMB	INC	3	G		G	G	G	В	В
GH3088X	RR2X	3.0	2	MB	М	3	1	1	PUR	LTW	BR	BL	INC	3	G	G	В	G	В	В	В
GH3152E3S	E3/STS	3.1	2	MB	MT	3	1	1	PUR	GR	BR	BF	INC	4	В	Р	В	В	G	В	-
GH3195X	RR2X	3.1	3	М	М	3	1	2	WH	LTW	BR	BL	INC	4	G	G	G	G	В	G	G
GH3347X NEW	RR2X	3.3	2	MT	Т	3	1	1	PUR	LTW	TN	BL	INC	2	В	G	В	В	G	В	В
GH3380E3 NEW	E3	3.3	3	MB	MT	3	2	1	PUR	LTW	BR	BR	-	-	-	-	-	-	-	-	G
GH3427LG	LL/GT27	3.4	3	М	М	2	2	2	PUR	LTW	TN	BL	INC	2	G	G	G	G	G	В	В
GH3475X	RR2X	3.4	3	MB	М	3	2	1	PUR	LTW	BR	BL	INC	3	G		В	G	В	В	G
GH3546X	RR2X	3.5	2	М	MT	3	1	1	PUR	LTW	BR	BL	INC	2	G	G	В	В	в	В	В
GH3582E3	E3	3.5	2	М	М	2	1	1	PUR	GR	TN	IMB	INC	2	В	Р	в	G	G	В	В
GH3624E3	E3	3.6	2	М	М	2	3	2	WH	GR	BR	BF	INC	2	F	F	В	G		F	В
GH3727LG	LL/GT27	3.7	2	М	М	3	3	1	PUR	LTW	BR	BR	INC	3	В	Р	G	G	G	В	G
GH3728X	RR2X	3.7	2	М	М	2	1	1	PUR	GR	BR	IMB	INC	2	В	Р	G	G	В	G	В
GH3759E3S	E3/STS	3.7	2	М	МТ	2	1	1	WH	GR	BR	BF	INC	-	G	Р	В	G	В	В	В
GH3918E3S NEW	E3/STS	3.9	3	MB	М	3	2	1	WH	LTW	BR	BR	-	-	-	-	-	-	-	-	G
GH3922E3	E3	3.9	2	MB	М	2	1	1	WH	GR	BR	BF	INC	3	В	F	G	G	G	G	G
GH3927LG	LL/GT27	3.9	3	М	MT	2	2	1	WH	LTW	BR	BL	INC	-	G		F	В	G	В	В
GH3934X	RR2X	3.9	2	М	MT	3	2	2	PUR	GR	BR	IMB	INC	1	В	G	В	G	G	G	В
GH3982X	RR2X	3.9	2	MB	MT	3	1	1	PUR	LTW	TN	BL	INC	3	G	Р	G	В	F	В	G
GH4155E3	E3	4.1	2	MB	MT	2	1	1	PUR	LTW	TN	BR	INC	2	G	G	G	F	G	G	G
GH4201E3 NEW	E3	4.2	3	М	М	3	1	1	WH	LTW	BR	BR	INC	-	-	-	-	-	-	-	G
GH4227LGS	LL/GT27/STS	4.2	2	М	MT	2	2	1	WH	LTW	BR	BL	INC	1	F	Р	G	F	F	G	G
GH4240XS	RR2X/STS	4.2	2	М	MT	2	1	1	WH	GR	BR	BF	INC	3	G	Р	В	В	В	F	В
GH4307X	RR2X	4.3	3	М	MT	4	3	1	PUR	LTW	TN	BL	INC	4	В		В	В	В	G	G
GH4314E3	E3	4.3	3	MB	М	3	2	1	WH	GR	TN	BF	INC	2	F	Р	F	G	F	G	G
GH4474E3 NEW	E3	4.4	3	М	М	3	1	1	PUR	GR	TN	IMB	INC	-	-	-	-	-	-	-	G
GH4531XS	RR2X/STS	4.5	2	MB	MT	3	2	1	PUR	GR	BR	BF	INC	2	В	F	В	G	G	F	G
GH4612E3S	E3/STS	4.6	1	М	MT	3	3	1	PUR	GR	BR	IMB	EXC	2	В	Р	G	В	G	G	В
GH4627LG NEW	LL/GT27	4.6	3	М	М	3	1	1	PUR	LTW	BR	BR	EXC	-	-	-	-	-	-	-	F
GH4628X	RR2X	4.6	2	MB	MT	2	2	1	WH	LTW	TN	BR	INC	3	В	Р	В	В	G	Р	В
GH4823XS	RR2X/STS	4.8	2	MB	Т	3	2	2	WH	LTW	BR	BR	EXC	3	G	Р	G	G	G	F	G
GH4838E3S NEW	E3/STS	4.8	3	М	MT	4	3	1	PUR	GR	BR	IMB	INC	-	-	-	-	-	-	-	-
GH4877E3S	E3/STS	4.8	2	В	Т	4	3	1	WH	GR	BR	BF	INC	4	В	В	F	G	F	В	В
GH4917XS	RR2X/STS	4.9	2	MB	Т	5	4	1	PUR	LTW	TN	BL	INC	4	G	Р	F	G	В	F	G
GH5016E3S NEW	E3/STS	5.0	3	М	М	3	1	1	WH	GR	BR	BF	INC	-	-	-	-	-	-	-	-
GH5175XS	RR2X/STS	5.1	1	MB	MT	4	3	1	WH	GR	TN	BF	INC	4	F	Р	В	G	G	F	G
GH5189E3 NEW	E3	5.1	3	М	MT	4	3	1	WH	GR	BR	BF	EXC	-	_	-	-	-	-	-	-

^{*} NOTE: E3 product descriptions and ratings are sourced from the variety's genetic supplier and may change as additional data are gathered.

Herbicide Tolerant Traits

RR2X = Roundup Ready 2 Xtend® RR2X/STS = Roundup Ready 2 Xtend® and STS® E3 = ENLIST E3®

E3/STS = ENLIST E3® and STS® LL/GT27 = Liberty Link® and GT27™

LL/GT27/STS = Liberty Link®, GT27™ and STS®

Canopy/ Plant Type

B = Bush

T = ThinMT = Medium-Thin

M = Medium MB = Medium-Bush

Growth Habit

Plant Height

M = Medium

S = Short

T = Tall

IND = Indeterminate

DET = Determinate

MS = Medium-Short

MT = Medium-Tall

Color Abbreviations

BF = BuffBL = Black

 $\mathsf{BR} = \mathsf{Brown}$ GR = Gray

IMB = Imperfect Black IMY = Imperfect Yellow

LTW = Light Tawny

PUR = Purple

TN = TanTW = Tawny

WH = White

YEL = Yellow

Chloride Sensitivity

INC = Includer

EXC = Excluder

Adaptation to Soil Types/ **Yield Environments**

B = Best

G = Good

🗾 = Fair

P = Poor

- = Not available

_	AIN LITY*				DIS	SEASE/PI	EST*					PRODUCT
		Phytop Root			ean Cyst natode		ynita				oot	0
% Protein @13% mst.	% Oil @13% mst.	Gene Resistance	Field Tolerance	Gene Source	Race Resistances	Southern Stem Canker	Root Knot Nematode-Incognita	Iron Deficiency Chlorosis (IDC)	Brown Stem Rot (BSR)	Sudden Death Syndrome (SDS)	Frogeye Leaf Spot (FELS)	Golden Harvest Soybean Brands
35.1	20.4	Rps1k	4	PI88788	MR3	-	-	4	-	3	3	GH2818E3
34.9	19.1	S	4	PI88788	R3, MR14	-	-	3	2	3	5	GH2981X
36.6	19.9	Rps1k	4	PI88788	R3, MR14	-	-	4	3	3	4	GH3042E3
33.7	19.9	Rps1c	4	PI88788	R3, MR14	-	-	3	3	2	2	GH3088X
36.5	19.8	Rps1c	5	PI88788	MR3	-	-	6	3	4	5	GH3152E3S
34.7	19.2	Rps1c	4	PI88788	R3, MR14	-	-	3	5	3	4	GH3195X
33.7	19.4	S	3	PI88788	R3	-	-	3	3	3	2	GH3347X NEW
-	-	S	3	PI88788	-	1	-	3	-	4	4	GH3380E3 NEW
35.9	19.3	S	3	PI88788	MR3	-	7	3	-	3	3	GH3427LG
35.3	19.0	S	3	PI88788	R3	-	-	4	3	3	2	GH3475X
33.3	19.2	S	3	PI88788	R3	-	7	3	4	2	2	GH3546X
35.0	19.9	S	3	PI88788	R3, MR14	1	-	5	4	3	5	GH3582E3
37.0	18.8	S	3	PI88788	MR3	1	5	4	4	4	2	GH3624E3
37.4	19.1	Rps3a	5	PI88788	MR3	1	6	5	-	-	3	GH3727LG
35.7	19.1	Rps1c	2	PI88788	R3, R14	2	7	5	3	3	3	GH3728X
35.2	20.2	Rps1k	3	PI88788	MR3	1	6	5	5	4	2	GH3759E3S
-	-	Rps1k	4	PI88788	-	1	-	5	-	4	2	GH3918E3S NEW
35.1	20.2	Rps1a	4	PI88788	MR3	1	6	4	3	3	3	GH3922E3
36.9	19.5	S	4	PI88788	MR3	1	6	4	-	4	2	GH3927LG
35.7	19.4	Rps1c	4	PI88788	R3, R14	1	7	3	4	2	4	GH3934X
34.0	20.5	S	4	PI88788	R3, MR14	2	5	5	-	4	3	GH3982X
36.0	19.6	Rps3a	4	PI88788	MR3	-	5	3	4	5	3	GH4155E3
-	-	S	4	PI88788	-	1	-	-	-	3	2	GH4201E3 NEW
36.3	19.2	S	-	PI88788	MR3	1	7	5	-	5	3	GH4227LGS
34.5	19.5	Rps1c	3	PI88788	R3	1	8	6	2	3	5	GH4240XS
34.1	20.1	S	4	PI88788	R3, MR14	3	7	4	4	3	2	GH4307X
36.4	19.8	Rps1a	4	PI88788	MR3	1	6	5	4	4	2	GH4314E3
-	-	Rps1a	3	PI88788	-	1	-	-	-	2	3	GH4474E3 NEW
35.8	19.7	S	4	PI88788	MR3, MR14	1	7	4	3	3	5	GH4531XS
36.6	19.8	S	4	PI88788	MR3	1	5	6	4	3	4	GH4612E3S
-	-	S	4	PI88788	-	1	-	-	-	3	3	GH4627LG NEW
34.2	20.0	Rps1k	4	PI88788	R3, MR14	1	7	6	3	4	2	GH4628X
35.9	20.1	Rps1c	3	PI88788	MR3	1	7	5	3	4	2	GH4823XS
-	-	S	4	PI88788	-	1	-	-	-	4	3	GH4838E3S NEW
36.5	20.8	S	-	S	S	1	5	2	3	4	3	GH4877E3S
35.6	20.5	Rps1k	3	PI88788	R3, MR14	1	6	5	-	5	3	GH4917XS
-	-	S	4	PI88788	-	1	-	-	-	4	2	GH5016E3S NEW
34.0	20.5	Rps1k	4	PI88788	MR3, MR14	1	7	5	3	5	2	GH5175XS
-	-	S	4	PI88788	-	1		-	-	4	3	GH5189E3 NEW

Resistance Rating System

Indicates when a variety is resistant to a specific disease or pest. For Soybean Cyst Nematode (SCN) resistance, the nematode races the variety is resistant against are specified, when available. For Phytophthora, the gene conveying the resistance is listed.

Phytophthora Gene Resistance

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

 $Rps1k = Resistant \ to \ races \ 1\text{--}11, \ 13\text{--}15, \ 17, \ 18, \ 21\text{--}24, \ 26, \ 36\text{--}38, \ 44$

 $Rps3a = Resistant \ to \ races \ 1-5, \ 8, \ 9, \ 11, \ 13, \ 14, \ 16, \ 18, \ 23, \ 25, \ 28, \ 29, \ 31-35, \ 39, \ 44, \ 45$

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.

7, 31, 32, 36, 38 9 = Worst

Disease/Pest Ratings 1 = Best

- = Not available

Soybean Cyst Nematode (SCN)

R = Resistant

MR = Moderately Resistant

S = Susceptible

3 and/or 14 = Specific race of soybean cyst nematode

GH2818E3 BRAND

RM: 2.8

HIGH-YIELDING, GO ALMOST ANYWHERE GENETICS

- Broadly adapted with flexibility to move North or South
- Brings together SDS, SCN and Sclerotinia White Mold protection
- Easy-to-manage plant type supports all row spacings

					BEST
Rating	9	7	5	3	1
Emergence	•	•	•		0
Standability	•			•	
Phytophthora Field Tolerance	•	•	•	0	
Sudden Death Syndrome	•	•	•	•	
Frogeye Leaf Spot	•			•	
Southern Stem Canker		R	ating N	ot Ava	lable



GH3042E3 BRAND

RM: 3.0

BROADLY ADAPTED, HIGH-PERFORMING PRODUCT

- Excels under higher management practices
- Proven SDS tolerance allows for early planting
- Dependable standability







GH3088X BRAND

RM: 3.0

STRONG PERFORMER WITH EXCELLENT TOP-END YIELD POTENTIAL

- Great defensive package anchored by outstanding SDS tolerance
- Solid standability in an attractive plant type
- Rps1c gene with above average field tolerance to Phytophthora Root Rot

Rating Emergence	9	•	7	5		3	BEST 1
Standability	•	•	•	•	•	•	
Phytophthora Field Tolerance Sudden Death	•	Ι	Ξ	•		0	• •
Syndrome Frogeye Leaf Spot	•	٠	٠	•		•	• 0
Southern Stem Canker	0	0	0	Ratin	g No	t Ava	ailable





GH3152E3S BRAND

RM: 3.1

DELIVERS THE BUSHELS AND HANDLES STRESS

- Great performance in high-yielding environments
- · Maintains height, canopy, and branching under drought stress
- Outstanding emergence provides an early vegetative advantage





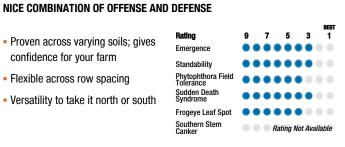




GH3195X BRAND

RM: 3.1

- Proven across varying soils; gives confidence for your farm
- Flexible across row spacing
- · Versatility to take it north or south





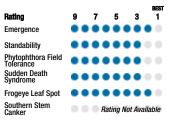
TEND SOYBEANS

GH3347X BRAND

NEW // RM: 3.3

HIGH-YIELDING GENETICS WITH PROVEN SDS TOLERANCE

- Performs across yield environments with exciting top-end yield potential
- Carries Frogeye Leaf Spot resistance gene
- Strong field tolerance to Phytophthora Root Rot







GH3380E3 BRAND

NEW // RM: 3.3

TOP-END YIELD WITH ROBUST AGRONOMICS

- Plant type handles stress well
- Dependable Phytophthora Root Rot field tolerance
- Consistent performance across environments

Rating Emergence	9	7	5	3	BEST 1
Standability	•	•	•	•	
Phytophthora Field Tolerance	•	•	•	•	
Sudden Death Syndrome	•	•	•	0	
Frogeye Leaf Spot	•	•	•	0.	
Southern Stem Canker	•	•	•	•	• •

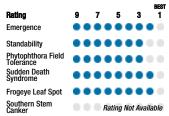


GH3546X BRAND

RM: 3.5

OFFENSIVE AND DEFENSIVE LEADER

- Great performance across yield levels
- Target fields with a history of Frogeye Leaf Spot or SDS
- Proven performance across varying soil types







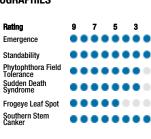
RM: 3.6

GH3582E3 BRAND

RM: 3.5

SUPERIOR PERFORMANCE ACROSS GEOGRAPHIES

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



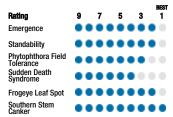




GH3624E3 BRAND

STABLE PERFORMANCE ACROSS ACRES

- Competes well in high-yielding environments
- Good choice for variable soils
- Delivers excellent Frogeye Leaf Spot protection







"OUR SEED ADVISORS AND SALES REPS WORK THROUGHOUT THE GROWING SEASON TO LEARN YOUR GROUND AND MANAGEMENT PRACTICES. WHEN IT COMES TIME TO CREATE A CROP PLAN, GOLDEN HARVEST IS IN THE UNIQUE POSITION TO BRING SYNGENTA GENETICS AND TRAITS AND POSITION THEM WITH E-LUMINATE TO HELP YOU REACH NEW LEVELS OF PRODUCTIVITY AND PROFITABILITY."

Andrew Lee

Head, Golden Harvest East Commercial Unit

GH3727LG BRAND

RM: 3.7

IMPRESSIVE YIELDS ON ANY ACRE

- Strong performance across years
- Flexible to move North or South of zone
- Superior protection from Southern Stem Canker

Rating Emergence	9	•	7	5	3	BEST 1
Standability	•	•	•	• • •	•	
Phytophthora Field Tolerance	•	•	•	• •		
Sudden Death Syndrome				Rating N	lot Avai	ilable
Frogeye Leaf Spot	•	•	•	• •	•	
Southern Stem Canker	•	•	•	••	•	•

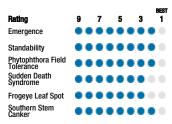


GH3728X BRAND

RM: 3.7

STRONG PERFORMANCE ACROSS ENVIRONMENTS

- Great yields North and South of zone
- Outstanding Phytophthora with proven SDS tolerance
- Very good heat and drought tolerance







GH3759E3S BRAND

RM: 3.7

NICE COMBINATION OF OFFENSE AND DEFENSE

- Rps1k gene with proven
 Phytophthora field tolerance
- Great performance in fine-textured, poorly drained soils
- Flexible product with STS herbicide tolerance

Rating Emergence	9	7	5	3	BEST 1
Standability	• •		•	•	
Phytophthora Field Tolerance	••	••	•	•	
Sudden Death Syndrome	• •	•	•	0 (
Frogeye Leaf Spot	• •		•	•	
Southern Stem Canker	••	••	•	•	•







GH3918E3S BRAND

NEW // RM: 3.9

CONSISTENT YIELDS WITH DEPENDABLE DEFENSE

- Excellent tolerance to Frogeye Leaf Spot
- Widely adapted to all soil types
- STS tolerance for flexible placement







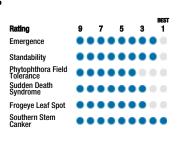


GH3922E3_{BRAND}

RM: 3.9

TOP YIELDS ACROSS ENVIRONMENTS

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





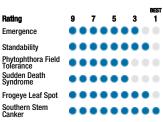


GH3927LG BRAND

RM: 3.9

CONSISTENT YIELDS AT ANY YIELD LEVEL

- Great standability for easy harvest
- Performs well on variable soils
- Superb tolerance to Frogeye Leaf Spot







GH3934X BRAND

RM: 3.9

PROVEN GENETICS DELIVER OUTSTANDING YIELD POTENTIAL AND SDS **TOLERANCE**

- Stable performance with top-end yield kick
- Performs well on heavy, poorly drained soils
- Top performance in all yield environments

Rating Emergence	9		7	5	3	BEST 1
Standability	•	•	• •	•	••	
Phytophthora Field Tolerance	•	•	• •	•	• 0	
Sudden Death Syndrome	•	•	• •	•	••	• 0
Frogeye Leaf Spot	•	•	• •	•	• •	
Southern Stem Canker	•	•	• •	•	••	••



GH3982X BRAND

RM: 3.9

BROADLY ADAPTED WITH TOP-END YIELD PUNCH

- Stable performance across soil types
- Strongest on highly productive dryland acres or under irrigation
- Excellent choice to push north

					BES
Rating	9	7	5	3	1
Emergence	•	• •	• •	••	•
Standability	•	• •	• •	• •	
Phytophthora Field Tolerance	•	• •	• •	• 0	
Sudden Death Syndrome	•	••	••	• 0	
Frogeye Leaf Spot	•	• •	• •	••	
Southern Stem Canker	•	• •	••	••	• 0

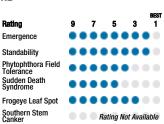


GH4155E3 BRAND

RM: 4.1

TOP PERFORMANCE ON THE TOUGH ACRE

- Broadly adapted across MG 4 acres
- Great season-long standability
- · Wide plant type shades rows quickly





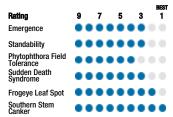


GH4201E3 BRAND

NEW // RM: 4.2

GREAT YIELDS WITH STRONG AGRONOMICS

- Performs well North and South of zone
- Solid tolerance to SDS
- · Maintains performance across all yield levels





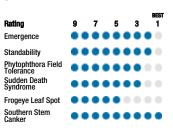


GH4240XS BRAND

RM: 4.2

CONSISTENT PERFORMANCE ON ANY ACRE

- Stability with STS herbicide tolerance
- Proven tolerance to SDS and Phytophthora Root Rot
- Adapted to both dryland and irrigated acres







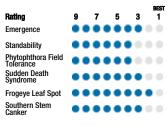


GH4307X BRAND

RM: 4.3

EXCEPTIONAL YIELD POTENTIAL WITH PROVEN AGRONOMICS

- Strongest on heavy- to medium-textured soils
- Excellent performance on both dryland and irrigated acres
- Outstanding Frogeye Leaf Spot tolerance with very good SDS tolerance







GH4314E3 BRAND

RM: 4.3

GOOD COMBINATION OF OFFENSE AND DEFENSE

- Well suited for variable soils
- Excellent Frogeye Leaf Spot tolerance
- · Performs across all soil types

Emergence Standability Phytophthora Field Sudden Death Syndrome Frogeye Leaf Spot Southern Stem Canker



GH4474E3 BRAND

NEW // RM: 4.4

BROADLY ADAPTED WITH TOP-END YIELDS

- Excellent tolerance to SDS
- Strong yields North and South of zone
- Solid Frogeye Leaf Spot tolerance

Standability Phytophthora Field Sudden Death Syndrome Frogeve Leaf Spot Southern Stem





RM: 4.6

GH4531XS BRAND

RM: 4.5

TOP-END YIELDS WITH THE STS HERBICIDE OPTION

- Great choice for both dryland or irrigated acres
- Excellent choice for double-crop acres
- Moves South of zone well

Emergence Standability Phytophthora Field Tolerance Sudden Death Frogeye Leaf Spot Southern Stem Canker



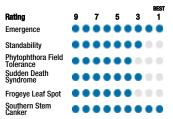




GH4612E3S BRAND

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









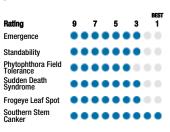
RM: 4.6

GH4627LG BRAND

NEW // RM: 4.6

GREAT YIELDS ACROSS ENVIRONMENTS

- Best performance in the Mid-South
- Ability to handle tight clay soils
- Excluder gene allows for flexible placement

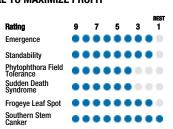


SCN

GH4628X BRAND

EXCELLENT TOP-END YIELD POTENTIAL TO MAXIMIZE PROFIT

- Great performance at any productivity level
- Excellent Frogeye Leaf Spot tolerance with Rps1k
- Plant type supports all row widths







GH4823XS BRAND

RM: 4.8

EXCITING YIELD POTENTIAL WITH STS TOLERANCE AND EXCLUDER GENE

- Excellent tolerance to Frogeye Leaf Spot
- Rps1c with reliable field tolerance to Phytophthora Root Rot
- Well suited for first crop or double crop planting

Rating	9	7	5	3	BEST 1
Emergence	•		•	•	•
Standability	•		•	•	
Phytophthora Field Tolerance	•	•	•	•	
Sudden Death Syndrome	•	•	•	0	
Frogeye Leaf Spot	•			•	• 0
Southern Stem Canker	•		•	•	• •







GH4838E3S BRAND

NEW // RM: 4.8

GREAT YIELD POTENTIAL WITH STS TOLERANCE

- Strong Frogeye Leaf Spot tolerance
- Good tolerance to SDS
- Excellent tolerance to Southern Stem Canker

Rating	9		7		5		3		BEST 1
Emergence	•	•	•	•	•	•	•		
Standability	•	•	•	•	•	•			
Phytophthora Field Tolerance	•	•	•	•	•	•			
Sudden Death Syndrome	•	•	•	•	•	•			
Frogeye Leaf Spot	•	•	•	•	•	•	•		
Southern Stem Canker	•	•	•	•	•	•	•	•	•





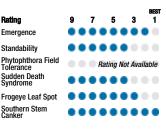


GH4877E3S BRAND

RM: 4.8

TALL ROBUST PRODUCT THAT YIELDS WELL ON TOUGH ACRES

- Very good Frogeye Leaf Spot tolerance
- STS herbicide tolerance for the double crop acre
- Excels on clay soils





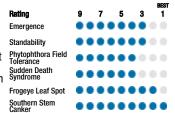


GH5016E3S BRAND

NEW // RM: 5.0

GREAT YIELDS WITH THE INDETERMINATE GROWTH HABIT

- STS tolerance with the ability to handle stress
- Great tolerance to Frogeye Leaf Spot
- Excellent tolerance to Southern Stem Canker









"GOLDEN HARVEST IS BUILT ON A LEGACY OF RELIABLE PERFORMANCE AND IS EXPANDING ITS STRONG SEED PORTFOLIO TO HELP FARMERS GET THE MOST YIELD OUT OF EVERY FIELD. OUR CORN HYBRIDS AND SOYBEAN VARIETIES ARE LOCALLY TESTED AND PROVEN ACROSS MULTIPLE YEARS AND ENVIRONMENTS, ENSURING STRONG AND CONSISTENT PERFORMANCE YEAR IN AND YEAR OUT."

Steve Wilkens

Golden Harvest East Agronomy Manager



GOLDEN HARVEST PREFERRED SEED TREATMENTS

Delivers customized soybean seed protection with improved disease control and handling properties:

- Contains an enhanced rate of Apron XL® seed treatment fungicide 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® 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 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 seed treatment fungicide

'U.S. trials with SDS pressure; 2015-2019. Trial locations: AR, IL, IA, KS, KY, MI, MN, MO, TN, WI. Trials with significantly different disease incidence/severity rating between Check and SDS treatment. CruiserMaxx Vibrance Beans is an on-seed application of CruiserMaxx Vibrance alone or with Apron XL.

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

SEED CARE



CruiserMaxx Vibrance

CruiserMaxx Vibrance seed treatment provides powerful protection for corn and soybeans 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.



Saltro® fungicide seed treatment provides consistently superior SDS protection without the plant stress. Delivering upgraded SDS protection, robust nematode activity and less early-season stress, Saltro helps soybeans reach their full genetic yield potential.

HERBICIDES



Acuron®

Acuron® corn herbicide helps unlock your corn's full yield potential by controlling tough weeds other products miss.



Tavium® Plus VaporGrip® Technology herbicide features two sites of action for contact and long-lasting residual control of key broadleaf and grass weeds in Roundup Ready 2 Xtend® Soybeans.

FUNGICIDES



Miravis® Neo fungicide provides plant-health benefits and longlasting protection against corn leaf blight (NCLB), gray leaf spot (GLS), tar spot and ear rot in corn. In soybeans, this product delivers broad spectrum control of devastating diseases like brown spot and frogeye leaf spot, while also controlling white mold.

INSECTICIDES



Force® 6.5G insecticide granular insecticide controls corn rootworm and other soil-dwelling insects in corn with a lower dust formulation that offers excellent application flexibility.



Besige® insecticide provides long-lasting protection against lepidopteran pests along with broad-spectrum control of other damaging insects.



DATA INSIGHTS DRIVE INFORMED DECISION-MAKING.

Our exclusive E-Luminate® digital agronomy platform contains over 15 years of environmental and trial data. That powerhouse of information enables your Golden Harvest Seed Advisor to more precisely place products for maximum performance and gain insights that inform next year's crop plan. Its capabilities include:



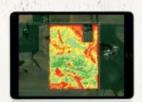
GaMePLaN

- Final field x field plan
- Rate assignments
- Proposals
- Customized product information



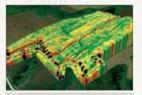
RangeFinder

- Variable rate scripts
- Auto-generated based on Golden Harvest trialing
- RangeFinder Population testing blocks



E-Luminate Mobile

- Disease-fungicide application
- Pollination timing
- Start yield expectations
- In-field Decision Hub



Decision Hub

- Weather data
- Predictive analytics
- Seasonal review
- Monitor data importation-yield, as applied

UNDERSTANDING THE AGRISURE TRAITS PORTFOLIO.

TO HELP FARMERS UNDERSTAND THE COMPETITIVE ADVANTAGE OF AGRISURE TRAITS, A STREAMLINED NAMING SYSTEM WAS DEVELOPED. THE NAMING SYSTEM CREATES CONSISTENCY FOR DELIVERY OF NEW TECHNOLOGY AND TRAIT-STACKING OPPORTUNITIES.

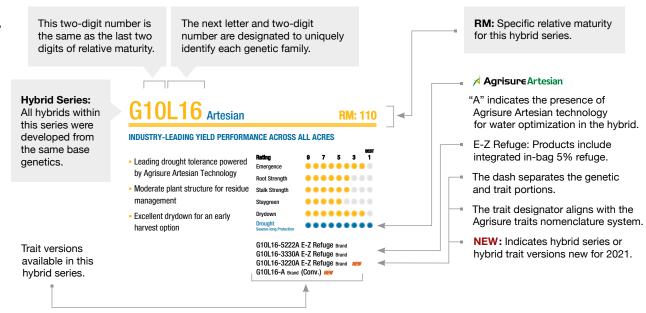


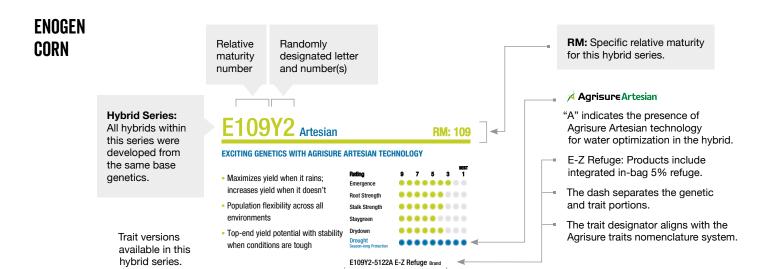
On each seed bag tag, farmers will see four numbers. How it works:

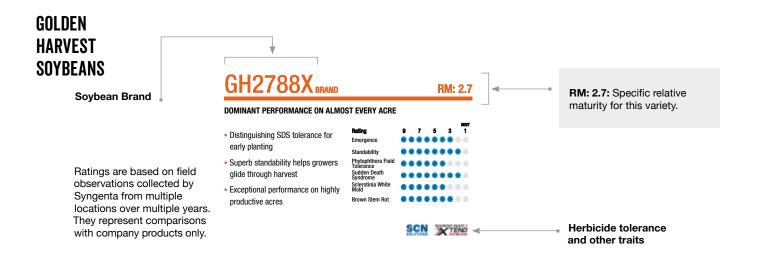
MASTER BRAN	D SUFFIX	TECH SERIES	TRAITS	ARTESIAN HYBRID	INTEGRATED, SINGLE BAG
Agrisure Agrisure	Duracade Viptera	[5] [3]	MODES OF ACTION 2 2 2 LETOZELLEP ROCENTORIN	[A]	E-Z Refuge
The master brand.	The brand suffix changes as new technologies are introduced.	The technology series is indicated by the first number.	The numerical identifiers represent the number of insect control modes of action. Note: Insect categories are in alphabetical order	The letter A indicates the hybrid is a water-optimized Agrisure Artesian hybrid.	The E-Z Refuge descriptor indicates that the hybrid is an integrated, single-bag refuge product.

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

GOLDEN HARVEST CORN







PROTECT AND PRESERVE.

A STRONG STEWARDSHIP PROGRAM IS ESSENTIAL FOR PROTECTING AND PRESERVING THE LONG-TERM **VALUE OF INSECT-PROTECTED** TRAIT TECHNOLOGY.

Golden Harvest provides responsible agriculture programs and information regarding the safe handling and storage of product.

STEWARDSHIP REQUIREMENTS

Read and understand the stewardship requirements found in the Syngenta Stewardship Guide, including applicable refuge requirements when planting insect- protected traits as set forth in the Syngenta Seeds, LLC Stewardship Agreement that you sign. To sign an agreement or view recommended planting configurations, please visit SyngentaStewardship.com or contact the Stewardship team: 1-877-476-2676. In addition, Enogen corn must be grown as an identity preserved crop in compliance with the Enogen stewardship program. By opening and using a bag of seed, you are reaffirming your obligation to comply with those stewardship requirements.

BEST MANAGEMENT PRACTICES

The agricultural industry has learned that, in addition to planting a refuge, a sound Integrated Pest Management (IPM) strategy is needed to prevent Corn Rootworm (CRW) resistance. For more information on how you can implement Best Management Practices (BMPs) on your farm, including crop and trait rotation, refer to the industry CRW BMPs found on the NCGA website at NCGA.com/CornRootworm or SyngentaStewardship.com.

CORN REFUGE REQUIREMENTS

It is important to recognize that different hybrid/trait packages may have different Insect Resistance Management (IRM) requirements. On-farm mixing of any seed is not an approved method to comply with stewardship requirements.

TRAIT STACK*	MINIMUM REFUGE REQUIREMENT CORN-GROWING REGION	MINIMUM REFUGE REQUIREMENT COTTON-GROWING REGION
Agrisure3000GT AgrisureArtesian	20%	50%
AgrisureViptera	20%	
AgrisureViptera 3220 t-2 Refuge AgrisureViptera 3300 t-2 Refuge Agrisure3120 E-2 Refuge Agrisure3122 E-2 Refuge AgrisureDuracade 5122 t-2 Refuge S222 t-2 Refuge	E-Z Refuge — no additional refuge required	20% supplemental refuge

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

Calculator available to help farmers plan how to meet the minimum refuge requirements for each Bt corn product on their farm. Download at www.irmcalculator.com

*These products may be offered as Agrisure Artesian® corn hybrids, which convert water to grain more efficiently. Artesian® corn hybrids are designated by an 'A' at the end of the

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.

Syngenta hereby disclaims any liability to Third Party websites referenced herein.











GRAIN MARKETING

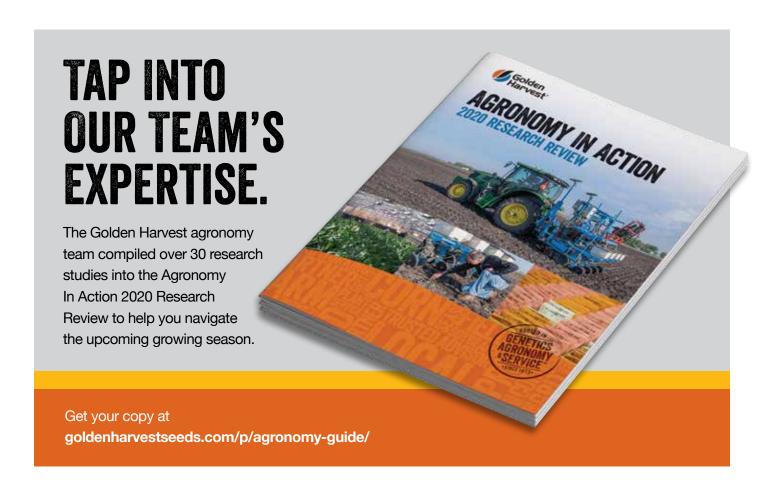
Farmers are encouraged to consult the Bio Trade Status website for the approval status of commercially available hybrids: BioTradeStatus.com. Talk to your grain handler prior to delivering crop so that it can be handled and marketed appropriately. Please contact your local seed representative with any questions.

CORN CROP PLANNING

Field Name:
Hybrid:
Population:
Management Considerations:
IG
Field Name:
Variety:
Population:
Management Considerations:

CORN CROP PLANNING

Field Name:	Field Name:
Hybrid:	Hybrid:
Population:	Population:
Management Considerations:	Management Considerations:
SOYBEAN CROP PLANNING	G
SOYBEAN CROP PLANNING	G Field Name:
Field Name:	Field Name:
Field Name: Variety:	Field Name: Variety:
Field Name: Variety: Population:	Field Name: Variety: Population:
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Product performance assumes disease presence.

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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 Roundup Ready 2 Yield® and Roundup Ready 2 Xtend® traits may be protected under numerous United States patents. It is unlawful to save soybeans containing these protected 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® soybeans. Only 2,4-D choline formulations with Colex-D® Technology are approved for use with Enlist E3® soybeans. Roundup Ready 2 Yield®, Roundup Ready 2 Xtend®, and VaporGrip® and YieldGard VT Pro® are trademarks of, and used under license from, Monsanto Technology LLC. ENLIST E3® soybean technology is jointly developed with Dow AgroScience 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. STS® is a registered trademark of DuPont. 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/

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