

CONTENTS

CORN

- 2 Corn Trait Portfolio
- 4 Corn Characteristics
- 6 Corn Hybrids
- 10 Corn Agronomic Management
- 13 Corn Silage Hybrid Selection
- 15 Enogen Hybrid Characteristics
- 16 Enogen Hybrids
- 17 Enogen Hybrid Agronomic Management

SOYBEANS

- 18 Soybean Trait Portfolio
- 20 Soybean Characteristics
- 22 Soybean Varieties

CROP PROTECTION

28 Wide-ranging Solutions

E-LUMINATE

30 Digital Agronomy Plaform

RESOURCES

- 31 Agrisure Traits Nomenclature
- 32 Hybrid & Variety Keys
- 33 Stewardship

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.¹



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 Ground Insect Protection	No Insect Protection	No Insect Protection
Golden Harvest Hybrid Series	Agrisure Duracade	Agrisure 3122	Agrisure 3120 Agrisure Viptera	Agrisure Viptera	Agrisure GT Agrisure GT/LL	Conventional
			·			
G95D32			3220		GT/LL	
G97N86	5222		3220			
G04G36 NEW G05K08	5122A			3111A NEW		
G07F23	012271			3111	GT	Conv.
G08D29	5122A		3120A			
G08R52			3220			
G07B39				3111A		
G09A86			3330 3000GT		GT/LL	
G09Y24	5222A		3220A			
G10D21 NEW			3330 NEW			
G10L16	5222A		3330A, 3220A NEW			ConvA NEW
G10T63		3122	3120			
G11A33			3220			
G11B63 G11F16			3120A	3111A	GTA/LL	
G11V76 NEW	5122 NEW		3120 NEW			
G12J11			3220A			
G12S75	5122 NEW					
G12U17	5122		3120			
G13H15	5122		3120			
G13N18				3111		
G13T41	5122		3120			
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.











	IATUR ORMA				С		RON		IIC STIC	s				СН		PLAN CTE		ICS							ASE					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	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	Southern Corn Leaf Blight	Eyespot	Anthracnose Stalk Rot	Tarspot	Fusarium Crown Rot	Common Rust	Southern Rust	Golden Harvest Hybrid Series
95	1280	2400	3	3	3	2	2	5	2	3	2	1	3	4	F	S-U	F	М	R	4	5	3	-	2	3	-	3	4	-	G95D32
97	1275	2400	2	2	4	2	3	3	3	3	3	5	3	2	М	U	SD	L	R	4	4	4	-	3	-	-	3	-	-	G97N86
104	1320	2550	4	2	2	3	1	3	5	3	4	-	5	6	М	S-U	SF	L	R	3	3	3	3	4	5	4	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	4	3	4	5	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	5	3	-	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	6	4	-	4	4	4	5	G08D29
108	1370	2580	3	3	2	2	2	4	4	4	4	-	5	5	М	U	SF	М	R	5	3	4	5	-	-	-	5	-	-	G08R52
109	1375	2570	4	2	5	4	1	4	4	5	4	-	3	4	М	Р	SF	М	Pi	5	4	4	5	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	4	5	-	4	4	5	4	G09A86
109	1420	2570	3	3	4	4	1	3	5	4	4	-	5	3	М	S-U	SF	М	R	5	2	4	4	3	-	4	5	-	5	G09Y24
110	1410	2570	3	2	3	3	3	5	3	4	4	-	3	2	М	S-U	SD	S	Pi	2	2	3	-	-	2	3	4	3	4	G10D21 NEW
110	1395	2620	2	3	4	4	1	4	5	2	4	-	5	6	М	S-U	SF	М	R	4	6	3	4	3	-	-	4	7	4	G10L16
110	1405	2580	2	2	4	4	2	4	3	2	2	-	2	3	M	U	SF	М	R	3	4	3	3	5	-	4	2	4	3	G10T63
111	1435	2600	4	4	2	2	2	3	2	3	3	-	5	4	M	Р	SF	М	R	3	3	5	4	2	-	4	4	3	3	G11A33
111	1425	2570	4	4	3	4	1	3	2	3	3	-	3	3	F	U	F	L	Pi	4	4	3	5	3	-	-	6	-	5	G11B63
111	1430	2590	4	4	2	2	1	4	2	3	5	-	5	5	M	Р	SF	М	R	4	3	5	4	2	-	5	3	4	4	G11F16
111	1430	2600	3	3	3	4	2	3	4	3	2	-	4	6	F	U	SF	L	Pi	4	3	6	6	-	3	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	3	4	-	-	4	3	3	G12J11
112	1430	2630	4	3	3	2	3	5	2	4	4	-	2	4	М	U	SF	М	R	3	3	3	6	-	3	2	3	7	4	G12S75
112	1425	2620	3	3	4	2	4	2	2	2	4	-	3	3	M	S-U		M	R -	4	3	5	5	-	-	-	2	-	-	G12U17
113	1420	2640	3	4	3	2	2	3	3	3	4	-	3	3	M	U	SD	M	R	3	4	3	5	-	-	-	2	-	-	G13H15
113	1415	2630	3	4	5	4	3	4	5	3	6	-	4	5	F	S-U	F	M	W	6	4	4	2	6	4	-	4	3	6	G13N18
113	1435	2605	4	3	2	2	2	2	2	3	3	-	4	5	М	S-U		L	R	4	2	5	4	2	-	-	4	2	4	G13T41
114	1425	2660	2	2	2	4	3	2	3	3	5	-	3	2	M	U	SF	M	Pi	5	5	5	4	3	-	-	4	7	5	G14N11
114	1435	2630	3	3	2	3	3	3	4	3	3	-	3	2	M	U	SD	M	R	5	4	4	4	3	4	-	3	3	4	G14R38
115	1455	2665	4	5	2	4	3	4	4	4	3	-	3	5	M	U	SF	L	W	4	2	5	3	-	2	2	4	7	4	G15J91 NEW
	1455	2645	2	3	3	4	4	3	2	4	2	-	4	5	M	S-U P		L NA	R	3	4	4	3	3	-	-	4	7	5	G15L32
116	1465	2690	4	3	5	3	2	3	3	2	4	-	4	4	M	-	F	М	Pi	5	4	3	3	5 5	3	-	4	6	5	G16K01
118	1480	2700	4	4	4	3	3	3	2	3	2	-	2	3	М	S-U	2L	L	R	3	3	4	3	5	_	-	4	3	3	G18D87

Rating Scale

1 = Best

9 = Worst - = Not available

Test Weight

1 = High

9 = Low

Plant Height

1 = Tall9 = Short

Ear Height

1 = High 9 = Low

Leaf Type U = Upright

P = Pendulum

Root Type

P = Penetrating M = Modified F = Fibrous

S-U = Semi-Upright

Ear Flex

F = FlexSF = Semi-Flex

SD = Semi-Determinate D = Determinate

Husk Cover S = Short

M = Medium L = Long

Cob Color

R = Red

Pi = PinkW = White

Disease Tolerance

1 = High

9 = Low

- = Not available

Drought

Agrisure Artesian water-optimized hybrid.

RM: 97

EXCELLENT YIELD PERFORMANCE IN HIGH-YIELD ENVIRONMENTS

- Dependable emergence with strong early vigor
- Responds well to high populations
- Superb stalks for season-long standability

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

G97N86-5222 E-Z Refuge Brand G97N86-3220 E-Z Refuge Brand G04G36 Artesian

NEW // RM: 104

YIELD STABILITY SUPPORTED BY OUTSTANDING ROOTS AND SOLID **STALKS**

- Agrisure Artesian corn hybrid provides superior drought tolerance
- Broadly adapted hybrid across all soil environments and management styles
- Solid choice for areas with low to moderate corn rootworm pressure



G04G36-3111A Brand MEM

EXCELLENT STALKS AND ROOTS FOR SEASON-LONG STANDABILITY

BROADLY ADAPTED HYBRID WITH CONSISTENT PERFORMANCE ACROSS YIELD ENVIRONMENTS

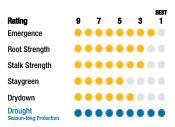
- Moderate plant stature with very good root strength
- Excellent stalk strength for late-season standability
- Consistent ear with very good grain quality

Emergence **Root Strenath** Stalk Strength Drydown Drought

G07F23-3111 Brand G07F23-GT Brand G07F23 Brand (Conv.)

G08D29 Artesian

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



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

RM: 108

Artesian

RM: 109

EXCELLENT TOLERANCE TO HEAT AND MOISTURE STRESS WITH BROAD ADAPTATION

- Ear flex allows for population flexibility
- Outstanding roots and stalks for season-long standability
- High-performing hybrid with very strong yield across multiple environments



G08R52-3220 E-Z Refuge Brand

EXCEPTIONAL DROUGHT TOLERANCE WITH AGRISURE ARTESIAN TECHNOLOGY

- Maximizes yield when it rains; increases yield when it doesn't
- Top-end yield potential makes this a good choice for highly managed
- Strong emergence and seedling vigor allows for early planting



G07B39-3111A Brand E107B3-3011A Brand G09A86

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

G10D21

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
 Root Strength stalk Strength
- Maximize yield potential and performance with higher populations

 Rating
 9
 7
 5
 3
 1

 Emergence
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0
 0

G10D21-3330 E-Z Refuge Brand NEW

G10L16 Artesian

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 NEW G10L16-A Brand (CONV.) NEW

G11A33

RM: 111

MODERATE PLANT HEIGHT WITH CONSISTENT YIELDS

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



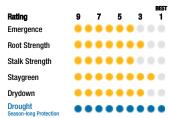
G11A33-3220 E-Z Refuge Brand E111A3-5122 E-Z Refuge Brand

G11B63 Artesian

RM: 111

PROVIDES EXCELLENT EAR FLEX AND AGRISURE ARTESIAN TECHNOLOGY

- Maximizes yield when it rains; increases yield when it doesn't
- Consistent yield performance across environments
- Dependable stalk and root strength



G11B63-3120A E-Z Refuge Brand G11B63-GTA/LL Brand E111C6-5122A E-Z Refuge Brand G11V76

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

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

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

G12S75

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

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

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



G12U17-5122 E-Z Refuge Brand G12U17-3120 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 and intactness
- Strong performance under drought conditions



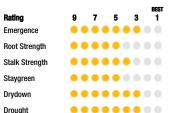
G13H15-5122 E-Z Refuge Brand G13H15-3120 E-Z Refuge Brand

G13N18

RM: 113

EXCELLENT TOLERANCE TO HEAT AND MOISTURE STRESS WITH WESTERN ADAPTATION

- Excels in high-management acres of the Western Corn Belt
- Solid performance in drought-prone and variable soil types
- Rapid drydown contributes to ease of harvest



G13N18-3111 Brand E113N8-3000GT Brand

G13T41

RM: 113

EXCELS IN HIGH-YIELD. HIGHLY PRODUCTIVE ENVIRONMENTS

- Superior root and stalk strength provides late-season intactness
- Versatile hybrid that performs well across all soil types
- Best performance in low to moderate pH soils



G13T41-5122 E-Z Refuge Brand G13T41-3120 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

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

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



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

 Rating
 9
 7
 5
 3
 1

 Emergence
 •
 •
 •
 •
 •
 •
 •
 •
 •
 •
 •
 •
 •
 •
 •
 •
 •
 •
 •
 •
 •
 •
 •
 •
 •
 •
 •
 •
 •
 •
 •
 •
 •
 •
 •
 •
 •
 •
 •
 •
 •
 •
 •
 •
 •
 •
 •
 •
 •
 •
 •
 •
 •
 •
 •
 •
 •
 •
 •
 •
 •
 •
 •
 •
 •
 •
 •
 •
 •
 •
 •
 •
 •
 •
 •
 •
 •
 •
 •
 •
 •
 •
 •
 •
 •
 •
 •
 •
 •
 •
 •
 •
 •
 •
 •
 •
 •
 •

G15J91-3220 E-Z Refuge Brand NEW

G15L32

RM: 115

STRONG AGRONOMICS WITH STABLE YIELD PERFORMANCE

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

Rating 9 7 5 3 1
Emergence 0 0 0 0 0 0 0
Root Strength 0 0 0 0 0 0 0 0
Stalk Strength 0 0 0 0 0 0 0
Drydown 0 0 0 0 0 0 0

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



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



G18D87-3111 Brand G18D87-GT Brand E118D8-3000GT Brand

CORN AGRONOMIC MANAGEMENT

PRODUC	т			AG	RONON	ИС МА	NAGEN	MENT A	ND PLA	CEME	NT TRA	ITS			E	ND-US	E TRAI	rs
			See	eding R	ate % /	Adjustn	nent				tation t							
Golden Harvest 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	ĪŌ	Feed to Gain
G95D32	95	G	В	В	G	G	3	2	G	В	G	В	В	В	В	F		G
G97N86	97	G	G	В	В	G	4	2	G	Р	G	В		G	G	В	F	G
G04G36 NEW	104	G	G	В	G	G	2	3		В		G	G	G	-			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		В	В	G		G	В	G
G08R52	108	G	G	В	G	G	2	2	G	В			G	G	В	G	Р	G
G07B39	109	G	В	В	G	G	5	4	G	В		G	В	F	G		В	G
G09A86	109		G	В	В	В	3	2	G	G		В	В	В	F	G	G	В
G09Y24	109	G	В	В	G		4	4		В	Р	В	В	G	F	G	В	F
G10D21 NEW	110	G	G	В	G	G	3	3	G			G	G	G	G	G	В	G
G10L16	110	G	G	В	G	G	4	4	В	В		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
G11B63	111	G	В	В	G	G	3	4	G	В	G	G	F	Р	В	G	F	В
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		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			G	В	G	В	В	В	F	G
G13H15	113		G	В	G		3	2	G	G		В	В	В	F	G	G	G
G13N18	113	G	В	В	G		5	4	В	G	G	В	G			G		В
G13T41	113	G	G	В	G	G	2	2	В	В	Р	В	В	В	F	G	G	G
G14N11	114	G	В	В	G		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	F	2	4	F	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	F	G
G16K01	116		G	В	В	G	5	3	G	В	Р	В	В	F	F	F	G	G
G18D87	118		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

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.

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 best 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 best 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 best 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 best 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)												(9)					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)*
G95D32	95	3	3	2	2	3	4	4	3	В		G	G	В	В	G	G	В	В	В	В
G97N86	97	2	4	3	3	3	2	4	4	В	В	G	F	G	В	G	G	В	В	В	В
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	F	G	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	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	F	G	F
G11B63	111	4	3	1	2	3	3	4	3	В	G	G	G	G			G		В		В
G11F16	111	4	2	1	2	5	5	4	5		G	G	G	В			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		G	G	G	G	G	G
G13H15	113	3	3	2	3	3	3	3	3	В		G		G		G	G	G	В	G	В
G13N18	113	3	5	3	5	4	5	6	4	F	G	G	G	G		В	В	В	G	В	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
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

- Hoight

Agrisure Artesian water-optimized hybrid.

- = Not available

Ratings Key

B = Best

G = Good

P = Poor

Drought:

= Fair

*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.**

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 OF	FERS*		IATUR ORMA			C				OMI RIS		s		C	НА	PI RAC	_AN		TIC	s		[DISE	EAS	E T	OLE	RA	NCI	=	
Enogen Hybrid Series	Above/Below Ground Insect Protection E-Z Refuge 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	Plant Height	Ear Height	Root Type	Leaf Type	Ear Flex	Husk Cover	Cob Color	Gray Leaf Spot	Northern Corn Leaf Blight	Goss's Wilt	Southern Corn Leaf Blight	Eyespot	Anthracnose Stalk Rot	Tarspot	Fusarium Crown Rot	Common Rust	Southern Rust
E107B3		3011A	109	1375	2570	4	2	5	4	1	4	4	5	4	3	4	М	Р	SF	М	Pi	5	4	4	5	3	4	-	4	-	6
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	3	_	4	5	_	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	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	5	-	-	4	3	3

Rating Scale	Plant Height	Root Type	Ear Flex	Cob Color	Drought:
1 = Best	1 = Tall	P = Penetrating	F = Flex	R = Red	Agrisure Artesian
9 = Worst	9 = Short	M = Modified	SF = Semi-Flex	Pi = Pink	water-optimized hybrid.
- = Not available	Ear Height	F = Fibrous	SD = Semi-Determinate	W = White	
Test Weight	1 = High	Leaf Type	D = Determinate	Disease Tolerance	
1 = High	9 = Low	U = Upright	Husk Cover	1 = High	
9 = Low		S-U = Semi-Upright	S = Short	9 = Low	
		P = Pendulum	M = Medium	- = Not available	
			L = Long		

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.

		HEKBICIDE	TULERANGE
	EVT TYPE	GLYPHOSATE	GLUFOSINATE
Engage Hybride with Agricure Durecode® 5122 trait stock	EZT1	X	X
Enogen Hybrids with Agrisure Duracade® 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.



E107B3 Artesian

RM: 109

EXCEPTIONAL DROUGHT TOLERANCE WITH AGRISURE ARTESIAN TECHNOLOGY

- Maximizes yield when it rains; increases yield when it doesn't
- Top-end yield potential makes this a good choice for highly managed acres
- Strong emergence and seedling vigor allows for early planting



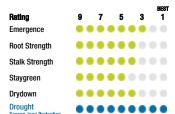
E107B3-3011A Brand

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

E114H6 Artesian

RM: 114

OUTSTANDING YIELD POTENTIAL WITH AGRISURE ARTESIAN TECHNOLOGY

- Maximizes yield when it rains; increases yield when it doesn't
- Proven yield across multiple soil types and environments for stable performance



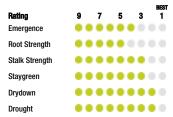
E114H6-5122A E-Z Refuge Brand

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



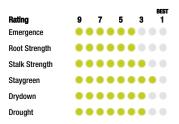
E116K4-3000GT Brand

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	СТ		AGRONOMIC MANAGEMENT AND PLACEMENT TRAITS								END	-USE TF	RAITS				
			Se	Seeding Rate % Adjustment			Adapta	Adaptation to Soil Types/Yield Environments				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	ĪŌ
E107B3	109	G	В	В	G	G	5	4	G	В	F	G	В		G		В
E109Y2	109	G	В	В	G		4	4	F	В	Р	В	В	G		G	В
E114H6	114	G	В	В	G	F	4	5	G	В	F	В	В		G		G
E116K4	116		G	В	В	G	5	3	G	В	Р	В	В			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)	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 best 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 Trials

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	DUCT		AGRONOMIC/PLANT CHARACTERISTICS*																			
Ø		y (RM)		уре						Color				ivity	ting			n to S nviron				icide onses
Golden Harvest Soybean Brands	Herbicide Tolerant Trait	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
GH3546X	RR2X	3.5	2	М	MT	IND	3	1	1	PUR	LTW	BR	BL	INC	2	G	G	В	В	В	В	В
GH3582E3	E3	3.5	2	М	М	IND	2	1	1	PUR	GR	TN	IMB	INC	2	В	Р	В	G	G	В	В
GH3624E3	E3	3.6	2	М	М	IND	2	3	2	WH	GR	BR	BF	INC	2	F	F	В	G		F	В
GH3728X	RR2X	3.7	2	М	М	IND	2	1	1	PUR	GR	BR	IMB	INC	2	В	Р	G	G	В	G	В
GH3759E3S	E3/STS	3.7	2	М	MT	IND	2	1	1	WH	GR	BR	BF	INC	-	G	Р	В	G	В	В	В
GH3918E3S NEW	E3/STS	3.9	3	МВ	М	IND	3	2	1	WH	LTW	BR	BR	-	-	-	_	-	-	-	-	G
GH3922E3	E3	3.9	2	MB	М	IND	2	1	1	WH	GR	BR	BF	INC	3	В	F	G	G	G	G	G
GH3927LG	LL/GT27	3.9	3	М	МТ	IND	2	2	1	WH	LTW	BR	BL	INC	-	G		F	В	G	В	В
GH3934X	RR2X	3.9	2	М	МТ	IND	3	2	2	PUR	GR	BR	IMB	INC	1	В	G	В	G	G	G	В
GH3982X	RR2X	3.9	2	MB	МТ	IND	3	1	1	PUR	LTW	TN	BL	INC	3	G	Р	G	В		В	G
GH4155E3	E3	4.1	2	MB	МТ	IND	2	1	1	PUR	LTW	TN	BR	INC	2	G	G	G	F	G	G	G
GH4201E3 NEW	E3	4.2	3	М	М	IND	3	1	1	WH	LTW	BR	BR	INC	-	-	-	-	-	-	-	G
GH4227LGS	LL/GT27/STS	4.2	2	М	МТ	IND	2	2	1	WH	LTW	BR	BL	INC	1	F	Р	G	F	F	G	G
GH4240XS	RR2X/STS	4.2	2	М	МТ	IND	2	1	1	WH	GR	BR	BF	INC	3	G	Р	В	В	В		В
GH4307X	RR2X	4.3	3	М	МТ	IND	4	3	1	PUR	LTW	TN	BL	INC	4	В	F	В	В	В	G	G
GH4314E3	E3	4.3	3	MB	М	IND	3	2	1	WH	GR	TN	BF	INC	2	F	Р	F	G	F	G	G
GH4474E3 NEW	E3	4.4	3	М	М	IND	3	1	1	PUR	GR	TN	IMB	INC	-	-	-	-	-	-	-	G
GH4531XS	RR2X/STS	4.5	2	MB	МТ	IND	3	2	1	PUR	GR	BR	BF	INC	2	В	F	В	G	G	F	G
GH4612E3S	E3/STS	4.6	1	М	МТ	IND	3	3	1	PUR	GR	BR	IMB	EXC	2	В	Р	G	В	G	G	В
GH4628X	RR2X	4.6	2	MB	МТ	IND	2	2	1	WH	LTW	TN	BR	INC	3	В	Р	В	В	G	Р	В
GH4741X	RR2X	4.7	2	М	МТ	IND	2	1	1	PUR	LTW	BR	BL	EXC	2	В	Р	В	G	G	Р	В
GH4823XS	RR2X/STS	4.8	2	MB	Т	IND	3	2	2	WH	LTW	BR	BR	EXC	3	G	Р	G	G	G	F	G
GH4838E3S NEW	E3/STS	4.8	3	М	МТ	IND	4	3	1	PUR	GR	BR	IMB	INC	-	-	-	-	-	-	-	-
GH4877E3S	E3/STS	4.8	2	В	Т	IND	4	3	1	WH	GR	BR	BF	INC	4	В	В	F	G	F	В	В
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
GH5016E3S NEW	E3/STS	5.0	3	М	М	IND	3	1	1	WH	GR	BR	BF	INC	-	-	-	-	-	-	-	-
GH5175XS	RR2X/STS	5.1	1	MB	MT	IND	4	3	1	WH	GR	TN	BF	INC	4	F	Р	В	G	G	F	G
GH5189E3 NEW	E3	5.1	3	М	МТ	IND	4	3	1	WH	GR	BR	BF	EXC	-	-	-	-	-	-	-	-
GH5270X	RR2X	5.2	2	М	МТ	IND	3	1	2	PUR	LTW	TN	BL	INC	2	F	F	G	F	G	F	G
GH5367X NEW	RR2X	5.3	2	М	Т	IND	2	1	2	PUR	GR	BR	IMB	INC	1		G	G	G	В		G
GH5622X NEW	RR2X	5.6	3	MB	М	DET	4	3	2	PUR	GR	TN	IMB	INC	-	G		G	G	G	G	G

^{*} 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™

Canopy/ Plant Type

T = ThinMT = Medium-ThinM = Medium MB = Medium-Bush B = Bush

Plant Height

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

Growth Habit

DET = Determinate

IND = Indeterminate

Color Abbreviations

BF = BuffBL = Black BR = 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

F = Fair P = Poor

- = Not available

	RAIN LITY*					DISEASE/	PEST*					PRODUCT
% mst.	st.	Phytophth Ro			ean Cyst natode		ognita		ot	(<u>(</u>	pot	t 8
% 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
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
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
34.2	20.0	Rps1k	4	PI88788	R3, MR14	1	7	6	3	4	2	GH4628X
35.4	20.1	Rps1k	4	PI88788	R3, MR14	2	7	5	3	3	3	GH4741X
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
37.9	19.3	Rps1c	3	PI88788	MR3, MR14	3	3	4	-	4	5	GH5270X
35.1	20.2	S	4	PI88788	MR3	3	6	3	3	3	2	GH5367X NEW
39.0	19.3	Rps1a	4	PI88788	R3	2	7	4	-	4	-	GH5622X 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.

Soybean Cyst Nematode (SCN)

R = Resistant

MR = Moderately Resistant

S = Susceptible

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

Disease/Pest Ratings

1 = Best

9 = Worst - = Not available 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

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

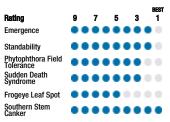


GH3582E3 BRAND

RM: 3.5

SUPERIOR PERFORMANCE ACROSS GEOGRAPHIES

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







GH3624E3 BRAND

RM: 3.6

STABLE PERFORMANCE ACROSS ACRES

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

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



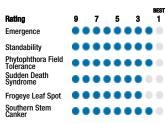


GH3728X BRAND

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





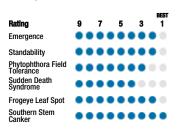


GH3759E3S BRAND

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







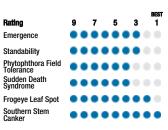


GH3918E3S BRAND

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

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



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

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





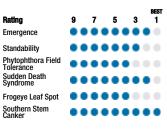
GH3934X BRAND

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



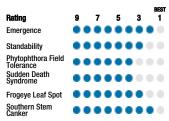


GH3982X BRAND

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







"GOLDEN HARVEST DELIVERS GENETICS, AGRONOMY & SERVICE. OUR SERVICE 365 IS A PROMISE TO DELIVER LOCAL TIMELY INSIGHTS TO GROWERS THROUGHOUT THE GROWING SEASON AND BEYOND. WE WANT TO BE YOUR PARTNER IN THE FIELD."

David Schlake

Golden Harvest West Agronomy Manager

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

Standability Phytophthora Field Tolerance Sudden Death Syndrome Frogeve Leaf Spot Southern Stem Canker Rating Not Available

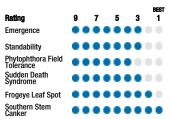


GH4201E3 BRAND

NEW // RM: 4.2

GREAT YIELDS WITH STRONG AGRONOMICS

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







GH4227LGS BRAND

RM: 4.2

DEPENDABLE YIELDS WITH STS HERBICIDE TOLERANCE

- Excellent standability and tolerance to Southern Stem Canker
- Very good tolerance to Frogeye Leaf Spot
- Stable performance across MG 4 acres

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





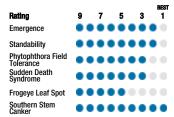


GH4240XS BRAND

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







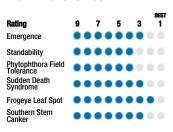


GH4307X BRAND

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



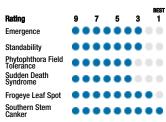


GH4314E3 BRAND

RM: 4.3

GOOD COMBINATION OF OFFENSE AND DEFENSE

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





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

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



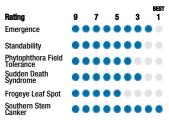


GH4531XS BRAND

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









GH4612E3S BRAND

|40 | 203 Brand RM: 4.6

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

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







GH4628X BRAND

RM: 4.6

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





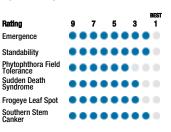


GH4741X BRAND

RM: 4.7

EXCLUDER PRODUCT WITH OUTSTANDING YIELD POTENTIAL

- Rps1k for genetic resistance to Phytophthora Root Rot
- Dependable tolerance to SDS and Frogeye Leaf Spot
- Excellent ROI potential on irrigated acres



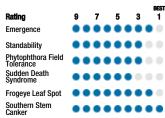


GH4823XS BRAND

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









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	• •			0 (
Phytophthora Field Tolerance	• •	•	•	0 (
Sudden Death Syndrome	• •	•	•	0 0	
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

Ratina	9	7	5	3	BES 1
Emergence	•	•	•		0
Standability	•	•	•	0.0	
Phytophthora Field Folerance		0 R	ating N	ot Avai	lable
Sudden Death Syndrome	•	•	•	0 0	
Frogeye Leaf Spot	•				
Southern Stem Canker	•	•	•	•	





GH4917XS BRAND

NO BRAND RM: 4.9

RELIABLE YIELD POTENTIAL WITH STS HERBICIDE TOLERANCE

- Excels on tough, droughty soils
- Strong Phytophthora Root Rot field tolerance with the Rps1c gene
- Tall, medium-bush canopy for double-crop acres

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





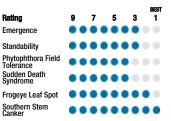


GH5016E3S BRAND

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







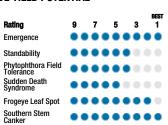


GH5175XS BRAND

RM: 5.1

VERSATILE PRODUCT WITH AGGRESSIVE YIELD POTENTIAL

- STS herbicide option for double crop applications
- Great tolerance to Frogeye Leaf Spot
- Adapted for dryland or irrigated acres







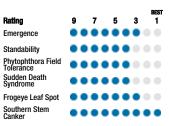


GH5189E3_{BRAND}

NEW // RM: 5.1

EXCELLENT YIELD POTENTIAL WITH THE EXCLUDER GENE

- Indeterminate growth habit with broad adaptability
- Excellent tolerance to Southern Stem Canker
- Proven tolerance to Frogeye Leaf Spot







GH5270X BRAND

RM: 5.2

INDETERMINATE PRODUCT WITH STRONG YIELD POTENTIAL

- Root Knot Nematode tolerance
- Stable performance across varying soil types
- Good performance on poorly drained soils with the Rps1c gene

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

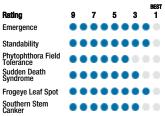


GH5367X BRAND

NEW // RM: 5.3

INDETERMINATE MG 5 WITH GREAT YIELDS

- Excellent tolerance to Frogeye Leaf Spot
- Strong SDS and Iron Deficiency Chlorosis tolerance
- Adapted to the entire MG 5 growing area





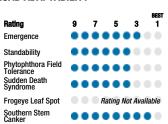


GH5622X BRAND

NEW // RM: 5.6

DEPENDABLE PERFORMANCE WITH BROAD ADAPTABILITY

- Excellent tolerance to Southern Stem Canker
- Adapted to all row widths
- · Well suited for first crop or double crop planting







"GOLDEN HARVEST IS FOCUSED ON PROVIDING THE BEST POSSIBLE CUSTOMER EXPERIENCE. WE ARE CONTINUALLY INVESTING IN INCREASED OFFERINGS, TECHNOLOGY AND OUR ENTIRE SERVICE TEAM TO ENSURE THAT WE WILL DELIVER ON THAT PROMISE NOW AND IN THE FUTURE."

Clayton Becker

Head, Golden Harvest West Commercial Unit



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

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:



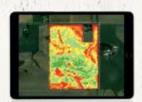
GaMePLaN

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



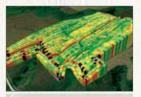
RangeFinder

- 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.

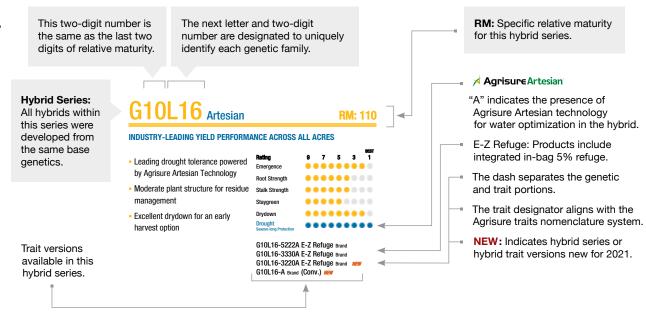


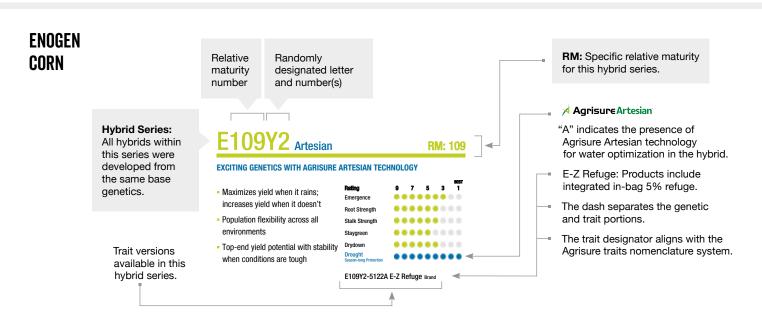
On each seed bag tag, farmers will see four numbers. How it works:

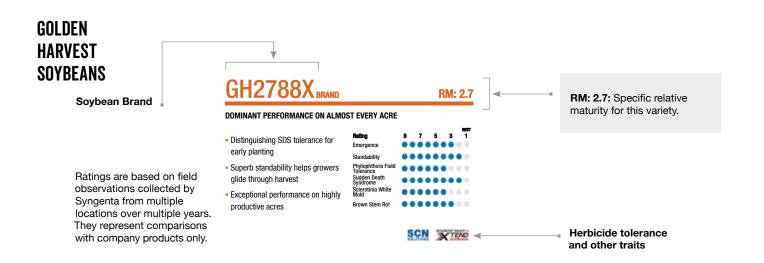
MASTER BRAND	SUFFIX	TECH SERIES	TRAITS	ARTESIAN HYBRID	INTEGRATED, SINGLE BAG
Agrisure Agrisure	Duracade Viptera	[5] [3]	MODES OF ACTION 2 2 2 LEON BOILER BOILER CONTINUOUS CONTINUO CON	[A]	E-Z Refuge
The master brand.	The brand suffix changes as new technologies are introduced.	The technology series 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	
COLDENI OKOL LEMMING	
Field Name:	Field Name:
Variety:	Variety:
Population:	Population:
Management Considerations:	Management Considerations:



Product performance assumes disease presence.

©2020 Syngenta. Important: Always read and follow label instructions. Some products may not be registered for sale or use in all states or counties. Please check with your local extension service to ensure registration status. AAtrex 4L, AAtrex Nine-O, Acuron, Agri-Flex, Agri-Mek 0.15EC, Agri-Mek SC, Avicta 500FS. Avicta Complete Beans 500, Avicta Complete Corn 250, Avicta Complete Corn 500, Avicta Duo Corn, Avicta Duo 250 Corn, Avicta Duo Cotton, Avicta Duo COT202, Besiege, Bicep II Magnum, Bicep II Magnum FC, Bicep Lite II Magnum, Callisto Xtra, Cyclone SL 2.0, Denim, Endigo ZC, Endigo ZCX, Epi-Mek 0.15EC, Expert, Force, Force 3G, Force CS, Force Evo, Force 6.5G, Gramoxone SL, Gramoxone SL 2.0, Gramoxone SL 3.0, Karate with Zeon Technology, Lamcap, Lamcap II, Lamdec, Lexar, Lexar EZ, Lumax, Lumax EZ, Medal II ATZ, Minecto Pro, Proclaim, Tavium Plus VaporGrip Technology, Voliam Xpress and Warrior II with Zeon Technology are Restricted Use Pesticides.

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/

All photos are either property of Syngenta or used with permission.















1-800-944-7333 | GOLDENHARVESTSEEDS.COM







