2022-23 PIONEER® BRAND PRODUCTS

NEW YORK AND NEW ENGLAND STATES

WHAT'S IN A BAG OF PIONEER® BRAND SEED?

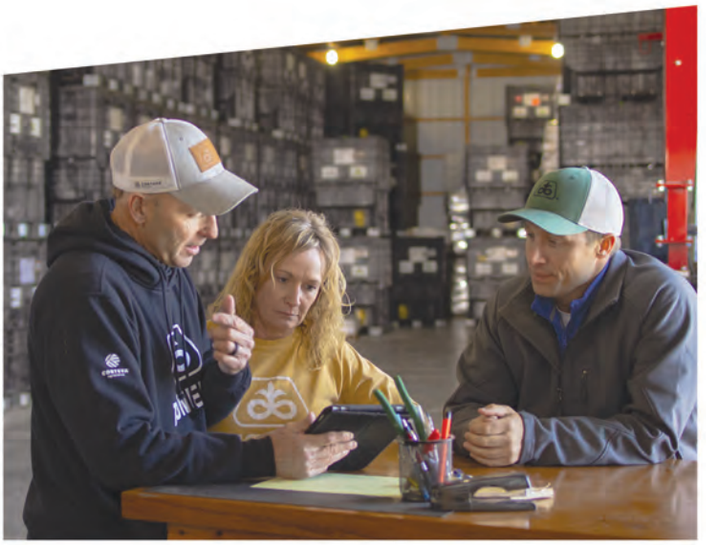
The answer is **more than ever before.** There's **best of the best genetics** built from the industry's **most advanced breeding process.** There's **testing, then more rigorous testing** to ensure only the best products are introduced. There's **revolutionized yield performance** that makes you rub your eyes when you see the yield monitor to make sure you're not seeing things.

But it's so much more than seed. It's making sure that seed reaches its full potential once it's in the ground. It's **superior protection against more diseases and pests.** It's a **boots-on-the-ground team of experts** working in unison to deliver the best solutions to every acre. And it's **ground-breaking digital tools** to help make confident decisions at every point in the growing season.

Your farm. Your goals. When you choose your next bag of Pioneer® brand seed, you can feel confident that you've made the right choice.

EVERYTHING TO MAKE THIS SEASON, YOUR BEST SEASON. UNTIL NEXT SEASON.

Pioneer has been an American-based seed brand since 1926. While we're proud of that heritage, we've always been driven to look forward and push the boundaries of what's possible – this season, and every season.



The Best of the Best Genetics

For nearly a century, Pioneer has been building and leveraging one of the richest germplasm libraries in the world to serve as the foundation for all our research and development efforts. It's how we can bring to market more exclusive, high-performing products, and why our robust product pipeline is primed to continue advancing trailblazing new traits and technologies.

The Most Advanced Breeding Process

We start with a world-class germplasm library, then extract winning combinations using a rigorous process that includes advanced breeding technologies, unique precision phenotyping tools and unequaled predictive analytics. It allows for the screening of billions and billions of data points more effectively than ever before. And we can bring you the best new products faster than ever before. With such a rich library to choose from, our breeders can afford to be really picky, selecting only the best 0.01% to go into a Pioneer seed bag.

Testing, Then More Testing, Then Testing Again

Every farm and farmer is unique, so we test every Pioneer product extensively in the locations where it will be sold and planted – in all different scenarios, and all kinds of conditions. We even go so far as to drive specially designed Boreas wind machines through fields to test standability and stalk strength. We conduct expansive on-farm hybrid testing over multiple years, because what works in Johnston, Iowa, might not be the best solution for your acres.

Revolutionized Yield Performance

Everyone knows the true measure of a successful season comes at harvest. That's when you'll be most impressed with the performance of Pioneer products. Our revolutionary new product advancement classes are resetting what's possible with yield performance. We expect a fair share of double-takes coming from combine cabs.

Superior Protection Against More Diseases and Pests

Corn rootworm. Phytophthora. Gray leaf spot. The list goes on and on. All trying to rob your fields of their potential. While the list gets longer, the protection we offer grows stronger. It starts with the robust agronomics bred into every Pioneer seed. From there, Pioneer premium seed treatments form a protective barrier against pests, disease and uncertain soil conditions, so seeds get off to a strong start. Then, the Corteva Agriscience™ crop protection portfolio delivers all the control needed to beat back weeds, insects and disease all season long.

A Boots-on-the-Ground Team of Experts

Our best-in-class customer experience starts with Pioneer sales representatives and our local teams of breeders and field agronomists that span the country to deliver local knowledge and insights. They live, work and many times farm in your community. It's the benefit of local teams, backed by a global leader in agriculture.

Confident Decisions with Granular Digital Tools

Data isn't valuable unless you can put it to work for you. To do that, our local Pioneer teams use Granular digital tools to turn your data into actionable insights aimed at making you more efficient and profitable now, and ultimately build stronger farms for the next generation. From field planning, to monitoring crop growth and nutrient needs, all the way through to analyzing harvest results – you'll feel confident making decisions at every point in the season.

INFUSE EVEN MORE PROFITABILITY INTO YOUR OPERATION.

TruChoice® Offer: Save on Your Favorite Products

Your needs don't go unnoticed. It's why we offer upfront savings on Corteva Agriscience™ crop protection products to help maximize your acres. When you fund a prepay TruChoice® offer account, you can save on more than 100 leading Corteva Agriscience crop protection products. Rewards can be easily tracked and managed online, and savings are immediate; no more waiting for rebates to show up in the mail.

Carbon Initiative: Get Paid for Good Practices

Everyone's talking about carbon, but your local Pioneer teams can help you cut through the clutter to capitalize on your good stewardship practices. Get help enrolling, access to premium prices and be assured that you always retain control of how you farm. With the Corteva Agriscience Carbon Initiative, you stay focused on farming, and we'll help get you the most money for your soil health practices.

CORN*

Hybrid Family[1]	Technology Segment[2] from Pioneer® brand Family[1]	CRM[3]	Silk CRM	GDUs to Silk	GDUs to Physiological Maturity[4]	Grain Drydown[5]	Stalk Strength	Root Strength	Stress Emergence[6]	Staygreen	Drought Tolerance[7]
P7211	AM	72	70	890	1730	6	6	5	4	3	7
INTRO **P7389**	AM	73	73	920	1710	5	6	6	4	6	7
P7527	AM	75	78	980	1810	7	5	5	5	3	7
NEW **P7574**	AM	75	77	970	1790	5	6	4	6	6	5
NEW **P7844**	AM	78	78	980	1940	7	6	6	4	6	6
P8034	Conv	80	82	1030	2020	7	8	8	4	5	6
INTRO **P8048**	AM	80	78	980	1860	6	6	6	4	5	6
NEW **P8294**	AM	82	85	1070	1940	5	5	4	5	6	6
P8407	Conv, Q	84	85	1100	2020	4	7	5	4	5	7
P8581	RR2	85	94	1180	2120	7	8	7	5	5	7
INTRO **P8602**	AM	86	84	1060	2040	4	5	6	5	5	7
P8639	AM	86	87	1090	2070	6	4	4	5	4	8
P8820	Q	88	88	1100	2190	3	6	7	4	4	6
P8859	AM NEW, Q INTRO	88	84	1060	2040	7	6	6	6	5	7
P8989	AM	89	87	1090	2090	4	5	5	5	4	6
P9188	Conv, AM	91	89	1120	2170	4	6	8	4	4	7
NEW **P9193**	AM, Q	91	90	1130	2140	4	5	6	6	5	7
P9233	Q	92	89	1120	2220	5	5	7	4	6	6
INTRO **P9466**	AML	94	93	1160	2370	5	6	7	7	6	7
NEW **P9489**	AM, Q	94	96	1200	2300	4	4	4	6	5	7
P9492	Conv, AM	94	97	1210	2350	6	7	7	7	7	7
P9535	AM	95	96	1200	2320	5	5	5	5	6	6
P9608	Conv, AM, Q	96	95	1190	2300	6	7	7	6	5	7
INTRO **P9624**	AM, Q	96	95	1190	2270	5	7	6	5	7	8
P9789	AMXT	97	99	1240	2300	5	5	6	6	7	6
NEW **P9823**	Q	98	95	1190	2420	4	5	6	5	5	6
AQ INTRO **P9845**	AM	98	100	1250	2420	3	5	5	6	6	9
P9946	AML	99	97	1210	2470	5	6	7	5	5	7
AQ **P9998**	Conv, AM, Q	99	99	1240	2350	3	6	6	4	4	9
NEW AQ **P0035**	AM, Q	100	99	1240	2420	5	5	6	5	7	9
P0075	Conv NEW, AM, Q	100	103	1280	2500	5	6	6	6	5	8
AQ **P0157**	Conv, AM, AMXT	101	102	1270	2450	5	5	7	5	4	9
AQ **P0306**	AM, Q	103	101	1260	2500	5	6	8	5	6	9
AQ **P0487**	Conv INTRO, Q NEW	104	103	1280	2530	4	5	5	6	5	9
AQ **P0506**	Conv, AM	105	105	1310	2530	7	6	4	5	7	9
P0720	Conv	107	106	1320	2630	5	6	7	5	6	8
NEW **P0732**	Q	107	112	1390	2680	5	6	6	6	6	6
P0843	Conv, AM	108	107	1330	2680	6	8	5	6	7	8
INTRO **P0859**	AM	108	111	1380	2650	5	7	6	4	7	7
NEW **P0924**	Q	109	109	1360	2700	5	5	6	6	6	7
P0947	Q	109	107	1330	2580	5	7	6	6	5	6
NEW **P0953**	AM	109	111	1380	2730	3	6	6	5	6	6
AQ **P1089**	AM, AMXT	110	109	1360	2630	3	6	4	6	5	9

NEW = NEW product INTRO = Introductory product. Quantities may be limited. AQ = Optimum® AQUAmax® product

Test Weight[8]	Plant Height[9]	Ear Height[10]	Husk Cover	Ear Flex[11]	Northern Leaf Blight[12]	Gray Leaf Spot[13]	Gibberella Ear Rot[14]	Anthracnose Stalk Rot	Tar Spot[15]
7	3	4	4	2	5				
6	4	5	6	4	6				
5	3	4	4	5	5				
6	6	6	5	3	4				
5	5	6	6	4	6				
5	4	4	4	3	7				
6	5	6	6	5	6				
5	7	7	4	4	5				
5	5	5	6	6	6				
5	7	7	4	7	5		7	4	
5	6	6	6	7	6				
4	6	8	5	6	7		4		
6	5	6	4	4	6				
5	5	7	6	4	5				
5	4	6	6	5	6		6		
6	4	4	6	5	7	5	5		
7	5	5	7	6	5		4		
6	6	7	5	6	6	3	5		
5	6	6	5	5	6	3	5		5
5	5	5	6	7	6	3	5		5
5	6	5	5	5	5	4	3		6**
5	6	6	4	6	6	4	4		6**
7	5	4	8	6	5	5	3		5
6	4	5	6	7	6	4			6
4	6	5	7	5	6	3	4		
5	6	6	5	6	6	5	4	2	5**
5	6	7	6	7	6	4	5		4
7	4	6	5	3	6	4	6		5
6	4	4	4	5	5	4	4	5	5
5	6	5	6	7	5	4	5	5	7
5	5	5	5	5	6	5	6	4	6**
6	4	4	7	6	5	4	4	4	5
6	3	4	6	5	5	4	4	4	5**
5	7	6	6	6	6	5	4	5	6
5	6	5	3	7	6	5	5	5	6
7	5	6	5	6	6	4	4	5	7
7	6	6	7	6	5	5		6	6
6	4	6	5	6	6	5	4	6	5**
6	6	6	7	7	6	5	4	5	5
7	6	6	7	5	6	5		4	6
7	7	6	6		7	5		6	6
6	6	5	7	6	6	5	3	6	5
8	6	6	7	6	6	6		6	4

FEATURED PRODUCTS

P8859AM™ NEW

- Offers high grain yield potential as well as exceptional tonnage and quality to the 80 CRM package.

P9193 Family NEW

- Takes yield potential in this maturity to another level with above average stress emergence and very good test weight.

P9489 Family NEW

- Impressive top-end yield potential whether you choose Optimum® AcreMax® or Qrome® technology; a welcome addition to the lineup.

P9535AM™

- Versatile-to-defensive, mid-90 day product with good ear flex and respectable early-season stand establishment.

P9624 Family INTRO

- New versatile product that offers excellent drought tolerance and good test weight.

P9823Q™ NEW

- Late 90-day product that can run with 100+ day products.

P0035 Family NEW

- Offensive-to-versatile Optimum® AQUAmax® product with outstanding performance across yield environments.

P0075 Family

- Leader product with above average emergence and low-end stability will allow placement across variable environments.

P0487Q™ NEW

- Offensive grain product that is highly suitable for early planting and corn-on-corn (high disease) acres.

CORN SILAGE*

Hybrid Family[1]	Technology Segment[2] from Pioneer® brand Family[1]	Silage CRM[16]	Silage Yield[17]	Starch and Sugar, %[18]	Fiber Digestibility[19]	Milk Per Acre[20]	Milk Per Ton[21]	Stalk Strength
BROWN MIDRIB (BMR) CORN PRODUCTS								
BOV INTRO **P9884~**	Q	98	7	8	B	7	8	
BMR **P0238**	XR	102	5	8	B	5	9	5
BOV INTRO **P0275~**	Q	102	7	7	B	7	9	
BMR **P0677~**	AMX	106	6	8	B	7	9	3
BMR **P1180**	XR	111	5	8	B	5	9	4
BOV INTRO **P1267~**	Q	112	7	8	B	7	8	
BMR **P1272~**	Q	113	6	7	B	7	8	
BMR **P1449~**	AMX	114	7	7	B	7	9	3
STANDARD SILAGE PRODUCTS								
P8859	AM **NEW**, Q INTRO	82	7	8	7	7	7	6
INTRO **P8294**	AM	83	8	7	5	8	6	5
P9188	Conv, AM	85	6	8	7	7	7	6
P8407	Conv, Q	86	8	8	8	8	8	7
P9193	AM, Q	89	8	8	7	9	7	5
P9233	Q	90	8	8	7	8	8	5
INTRO **P9466**	AML	92	8	8	8	8	7	6
NEW P9489	AM, Q	92	8	8	6	9	7	4

NEW = NEW product INTRO = Introductory product. Quantities may be limited. BOV = Bovalta™ BMR Corn BMR = Brown MidRib Corn

Root Strength	Stress Emergence [6]	Drought Tolerance [7]	Plant Height [9]	Ear Height [10]	Northern Leaf Blight [12]	Gray Leaf Spot [13]	Tar Spot [15]
6	5		5	5	5	5	
7	5		6	8	4	5	
6	6	6		5	5		
3	6		4	4	4	3	
7	6		4	6	5	5	
7	5		6	6	5	6	
6	5		7	6	5	6	
5	5	6	8	7	5	4	
6	6	7	5	7	5		
4	5	6	7	7	5		
8	4	7	4	4	7	5	
5	4	7	5	5	6		
6	6	7	5	5	5		
7	4	6	6	7	6	3	
7	7	7	6	6	6	3	5
4	6	7	5	5	6	3	5

FEATURED PRODUCTS

P9884Q™ INTRO

- Introductory 98-day BMR product. High performance potential in earliest BMR offering from Pioneer.

P0275Q™ INTRO

- New BMR product with Qrome® trait that offers higher yield potential and improved quality at 102-day maturity.

P9193 Family

- Leader platform offering next level yield potential and improved quality for this maturity zone.

P9489 Family NEW

- New offering in this maturity zone bringing increased performance at all yield levels. Should handle some tough growing conditions.

CORN SILAGE*

Hybrid Family[1]	Technology Segment[2] from Pioneer® brand Family[1]	Silage CRM[16]	Silage Yield[17]	Starch and Sugar, %[18]	Fiber Digestibility[19]	Milk Per Acre[20]	Milk Per Ton[21]	Stalk Strength
STANDARD SILAGE PRODUCTS								
P9377	AMXT	93	9	7	7	6	6	4
P9492	Conv, AM	94	8	8	7	8	7	7
P9789	AMXT	95	8	7	8	8	7	5
INTRO **P9624**	AM, Q	96	7	7	6	7	7	7
AQ INTRO **P9845**	AM	96	9	7	6	7	7	5
NEW P9823	Q	98	9	7	7	8	7	5
P0031	Q	101	8	9	6	9	7	5
AQ **NEW P0035**	AM, Q	101	9	7	7	8	7	5
AQ **P0487**	Conv INTRO, Q **NEW**	101	8	9	7	8	8	5
AQ **P9998**	Conv, AM, Q	103	8	7	7	8	7	6
P0242	AMXT	104	7	9	8	8	9	6
P0807	Q	104	7	9	8	8	8	6
P0075	Conv, AM, Q	106	8	7	9	8	8	6
AQ **P0157**	Conv, AM, AMXT	107	8	8	7	8	7	5
AQ **P0306**	AM, Q	108	8	9	8	8	9	6
NEW P0732	Q	108	8	8	9	8	8	6
INTRO **P0859**	AM	108	8	8	8	8	8	7
P0843	Conv, AM	109	8	9	9	9	9	8
P0947	Q	111	8	8	8	9	8	7
AQ **P1089**	AM, AMXT	111	8	8	8	8	8	6
NEW P0817	Q	112	9	8	8	9	7	5
P1380	Q	114	9	7	7	8	7	7

Optimum AcreMax ABOVE

Optimum AcreMax ABOVE/BELOW Xtra

Optimum AcreMax ABOVE/BELOW XTreme

QROME

Optimum AcreMax ABOVE Leptra

Bovalta BMR

Optimum AQUAmax

HERCULEX XTRA HX

LIBERTY LINK

Roundup Ready CORN 2

AgrisureRW

AgrisureViptera

GRAIN CORN FOOTNOTES

* All scores of integrated refuge products are based upon the major component

** All Pioneer products are hybrids unless designated with AM1, AM, AML, AMT, AMX, AMXT and Q, in which case they are brands.

** Ratings denoted with a double asterisk (**) reflect preliminary data subject to change when additional data becomes available.

Product performance in water-limited environments is variable and depends on many factors such as the severity and timing of moisture deficiency, heat stress, soil type, management practices and environmental stress as well as disease and pest pressures. All products may exhibit reduced yield under water and heat stress. Individual results may vary.

IMPORTANT: Trait rating scores provide key information useful in selection and management of Pioneer® brand products in your area. Information and ratings are based on comparisons with other Pioneer brand products, not competitive products. Information and scores are assigned by Pioneer Research Managers. Scores are based on period-of-years testing through 2021 harvest and were the latest available at time of printing. Some scores may change after 2022 harvest. Scores represent an average of performance data across areas of adaptation, multiple growing conditions, and a wide range of both climate and soil types, and may not predict future results. All products within a hybrid family receive the same score unless observations indicate a significant difference. Individual product responses are variable and subject to a variety of environmental, disease and pest pressures. Please use this information as only one component of your product positioning decision. Refer to www.pioneer.com or contact a Pioneer sales professional for the latest and most complete listing of traits and scores for each Pioneer brand product and for product placement and management suggestions specific to your operation and local conditions.

RATINGS: 9 = Outstanding; **1** = Poor; Blank = Insufficient Data.

[1] **HYBRID FAMILY:** Hybrid family identifies products that have the same base genetics. Manage products within the same family similarly.

[2] **TECHNOLOGY SEGMENT: AM** – Optimum® AcreMax® insect protection system with YGCB, HX1, LL, RR2. Contains a single-bag integrated refuge solution for above-ground insects. In EPA-designated cotton-growing counties, a 20% separate corn borer refuge must be planted with Optimum AcreMax products. **AMX** – Optimum® AcreMax® Xtra insect protection system with YGCB, HXX, LL, RR2. Contains a single-bag integrated refuge solution for above- and below-ground insects. In EPA-designated cotton-growing counties, a 20% separate corn borer refuge must be planted with Optimum AcreMax Xtra products. **AMXT** (Optimum® AcreMax® XTreme) – Contains a single-bag integrated refuge solution for above- and below-ground insects. The major component contains the Agrisure® RW trait, the Bt trait and the Herculex® XTRA gene. In EPA-designated cotton-growing counties, a 20% separate corn borer refuge must be planted with Optimum AcreMax XTreme products. **Q** (Qrome®) – Contains a single-bag integrated refuge solution for above- and below-ground insects. The major component contains the Agrisure® RW trait, the Bt trait, and the Herculex® XTRA gene. In EPA-designated cotton-growing counties, a 20% separate corn borer refuge must be planted with Qrome products. Qrome products are approved for cultivation in the U.S. and Canada. They have also received approval in a number of importing countries, most recently China. For additional information about the status of regulatory authorizations, visit http://www.biotradestatus.com/. **AML** – Optimum® AcreMax® Leptra® products with AVBL, YGCB, HX1, LL, RR2. Contains a single-bag integrated refuge solution for above-ground insects. In EPA-designated cotton-growing counties, a 20% separate corn borer refuge must be planted with Optimum AcreMax Leptra products. **HX1** – Contains the Herculex® I insect protection gene which provides protection against European corn borer, southwestern corn borer, black cutworm, fall armyworm, lesser corn stalk borer, southern corn stalk borer, and sugarcane borer; and suppresses corn earworm. **HXX** – Herculex® XTRA contains the Herculex® I and Herculex® RW gene. **YGCB** – The Bt trait offers a high level of resistance to European corn borer, southwestern corn borer and southern cornstalk borer; moderate resistance to corn earworm and common stalk borer; and above average resistance to fall armyworm. **LL** – Contains the LibertyLink® gene for resistance to Liberty® herbicide. **RR2** – Contains the Roundup Ready® Corn 2 trait that provides crop safety for over-the-top applications of labeled glyphosate herbicides when applied according to label directions. **AQ** – Optimum® AQUAmax® product; **BMR** – Brown MidRib Corn. **BOV** – Bovalta™ BMR Corn.

NEW = NEW product INTRO = Introductory product. Quantities may be limited. AQ = Optimum® AQUAmax® product

Root Strength	Stress Emergence [6]	Drought Tolerance [7]	Plant Height [9]	Ear Height [10]	Northern Leaf Blight [12]	Gray Leaf Spot [13]	Tar Spot [15]
8	6	7	6	8	6	4	
7	7	7	6	5	5	4	6**
6	6	6	6	5	6	3	
6	5	8	4	5	6	4	6
5	6	9	6	7	6	4	4
6	5	6	6	6	6	5	5**
6	6	6	5	6	6	5	5**
6	5	9	6	5	5	4	7
5	6	9	7	6	6	5	6
6	4	9	4	4	5	4	5
5	5	7	6	5	5	5	
7	6	6	6	6	7	6	6**
6	6	8	5	5	6	5	6**
7	5	9	4	4	5	4	5
8	5	9	3	4	5	4	5**
6	6	6	6	6	5	5	6
6	4	7	6	6	6	5	5
5	6	8	4	6	6	5	5**
6	6	6	7	6	7	5	6
4	6	9	6	6	6	6	4
5	6	7	7	7	5	5	5
5	5	8	7	6	6	5	7**

FEATURED PRODUCTS

P9823Q™ NEW

- New, high yield potential product with impressive silage data. Very high NDFd.

P0035 Family NEW

- Dual-purpose leader. Improved yield potential and quality compared to some current silage leaders.

P0487 Family NEW

- New offering that should shine in all yield environments, with an excellent disease package.

P0732Q™ NEW

- Versatile 108-day product with next level yield potential and silage quality.

P0817Q™ NEW

- Offensive, non-BMR silage or high-moisture corn product with exceptional tonnage potential and reliable forage quality.

[3] **CRM (Comparative Relative Maturity):** There is not an industry standard for maturity ratings so comparing product maturity and harvest moisture ratings between companies is usually difficult. Use the CRM rating to compare Pioneer® brand products with competitive products of a similar maturity and harvest moisture. CRM ratings, and harvest moistures, for products within a family may vary slightly, depending upon the level of insect (ECB and CRW) infestation. Conventional and straight products with the RR2 gene within a family will usually be 1-2 CRMs earlier than indicated, when insect infestations are moderate to heavy. One CRM difference is about ½ point of moisture difference at harvest.

[4] **GDUs TO PHYSIOLOGICAL MATURITY:** Measures differences in growing degree units (GDUs) required to zero milkline stage. To help decide if a new product fits your area's growing season, compare its GDUs to physiological maturity to a product that you plant or one that is successfully used in your area.

[5] **GRAIN DRYDOWN:** Compares products of similar maturity for rate of moisture loss during grain drydown. A higher score indicates faster drydown. A lower score indicates slower drydown, or a wider opportunity for silage and high-moisture corn harvest.

[6] **STRESS EMERGENCE:** All products are expected to establish normal stands under average soil conditions. Stress emergence is a measure of the genetic ability or potential to emerge in the stressful environmental conditions of cold, wet soils or short periods of severe low temperatures, relative to other Pioneer brand products. Ratings of 7-9 indicate very good potential to establish normal stands under such conditions; a rating of 5-6 indicates average potential to establish normal stands under moderate stress conditions; and ratings of 1-4 indicate the product has below average potential to establish normal stands under stress and should not be used if severe cold conditions are expected immediately after planting. Stress emergence is not a rating for seedling disease susceptibility, early growth or speed of emergence.

[7] **DROUGHT TOLERANCE:** Drought tolerance is a complex trait, determined by a platform's ability to maintain yield in limited-moisture environments. A higher score indicates the potential for higher yields vs. other platforms of similar maturity in limited-moisture environments.

[8] **TEST WEIGHT:** Higher score indicates heavier test weight.

[9] **PLANT HEIGHT: 9** = Very Tall; **1** = Short.

[10] **EAR HEIGHT: 9** = High; **1** = Low.

[11] **EAR FLEX:** Score reflects the ability of a product to flex ear size as plant density is reduced, or as growing conditions improve.

DISEASE PRECAUTION: Grower should balance product yield potential, product maturity and cultural practice selection against their anticipated risk of a specific disease and need for resistance. In high disease-risk conditions, consider planting products with at least moderate resistance ratings of 4 or higher to help reduce risk. When susceptible products with disease ratings of 1 to 3 are planted in conditions of high disease pressure, the grower assumes a higher level of risk. If conditions are severe, even products rated as resistant can be adversely affected. Independent of yield reduction, diseases can predispose plants to secondary diseases such as stalk rots. This requires individual field and product monitoring for stalk stability and timely harvest when warranted.

DISEASE & PEST RATINGS: 8-9 = Highly Resistant; **6-7** = Resistant; **4-5** = Moderately Resistant; **1-3** = Susceptible; Blank = Insufficient Data.

[12] **NORTHERN LEAF BLIGHT CAUTION:** In conditions where northern leaf blight (NLB) risk is high, growers should consider planting only products with at least moderate NLB resistance ratings of 4 or higher.

[13] **GRAY LEAF SPOT PRECAUTION:** Avoid planting products with a lower gray leaf spot (GLS) rating in continuous corn fields that have a history of GLS infection, unless tillage operations that bury significant amounts of corn residue and inoculum are practiced.

[14] **GIBBERELLA EAR ROT CAUTION:** Ratings based upon visual symptoms at harvest. If Gibberella ear rot has caused significant damage in the past, growers should consider planting only products with at least moderate Gibberella ear rot ratings of 5 or higher.

[15] **TAR SPOT CAUTION:** Scores reflect the relative sensitivity of the hybrids evaluated. Products with higher scores pose lower risk of severe disease development. In areas with tar spot pressure, consider using products with higher tar spot ratings. In addition, consider the use of fungicides labeled for use on tar spot when the disease is present. As more evidence is collected, suggested score minimums for high-risk conditions will be developed.

SILAGE CORN FOOTNOTES

~ The minor component of this blend product is not a Brown MidRib Corn hybrid.

[16] **SILAGE CRM (Silage Comparative Relative Maturity):** With no industry standard for silage maturity, comparing maturity and harvest moisture across various companies' corn-for-silage hybrids can be difficult. Pioneer silage CRM ratings provide a relative comparison among Pioneer® brand products of rates at which products reach harvestable whole plant moistures. It is on the same scale as the CRM rating provided for grain corn products and does not represent actual days from planting or emergence to harvest moisture or half milkline.

[17] **SILAGE YIELD:** Based on whole-plant yield per acre (adjusted to 35% dry matter) from multi-year comparison with other products within a maturity range not exceeding 5 silage CRM units.

[18] **STARCH AND SUGAR, %:** Percent starch and soluble sugars (DM basis) in the whole-plant sample predicted by NIRS.

[19] **FIBER DIGESTIBILITY:** Based on 30-hour rumen-fluid based estimate of the percent of ruminally degradable neutral detergent fiber (NDF) as a percent of total NDF in whole-plant samples, predicted by NIRS. Brown MidRib Corn hybrids are designated with "B" since NDFD30 averages 6-8 percentage points higher than non-BMR silage hybrids. To optimize fiber digestibility, growers should consider use of BMR Corn hybrids.

[20] **MILK PER ACRE: 9** = Outstanding; **1** = Poor, based on University of Wisconsin MILK2006 utilizing silage yield, nutrient content and digestibility.

[21] **MILK PER TON: 9** = Outstanding; **1** = Poor, based on University of Wisconsin MILK2006 utilizing silage nutrient content and digestibility.

SOYBEANS

Variety/ Brand*	Relative Maturity[1]	Technology Segment[2]	SCN Resistance Source[3]	Harvest Standability	Field Emergence[4]	Canopy Width[5]	Plant Height for Maturity[6]
ENLIST E3® TECHNOLOGY							
P03T87E™	0.3	E3	PI88788	8**	8	7	3
P06T32E™	0.6	E3	PI88788	7**	7	6	4
P09T68E™	0.9	E3	PI88788	6**	7	7	5
P13T47E™	1.3	STS,E3	PI88788	7	7	5	5
NEW P17A87E™	1.7	E3	PI88788	7	7	5	5
NEW P18A73E™	1.8	E3	Peking	7	7	5	4
NEW P21A53E™	2.1	E3	PI88788	7	7	6**	4
NEW P23A40E™	2.3	E3	PI88788	7	6	4**	6
NEW P25A16E™	2.5	E3	Peking	8	7	6	5
NEW P28A65E™	2.8	E3	PI88788	8	6	6	4
NEW P29A19E™	2.9	E3	PI88788	7	7	6	5
NEW P31A73E™	3.1	E3	Peking	7	7	6**	4
PLENISH® HIGH OLEIC SOYBEANS							
NEW P19A27PR™	1.9	Plenish,R	Peking	7	6	4	5
P21A31PR™	2.1	Plenish,R	Peking	7	8	6	4
P22A36PR™	2.2	Plenish,R	Peking	7	7	6	6
NEW P24A46PR™	2.4	Plenish,R	Peking	7	7	5	5
P27A26PR™	2.7	Plenish,R	Peking	8	8	6	4
P28A83PR™	2.8	Plenish,R	PI88788	7	8	4	5
P30A46PR™	3.0	Plenish,R	PI88788	7	7	4	5
ROUNDUP READY 2 XTEND® TECHNOLOGY							
P06A48X™	0.6	RR2X	PI88788	7	7	5	4
P07A18X™	0.7	RR2X	PI88788	8	8	6	5
P09A62X™	0.9	RR2X	-	5	8	5	5
P13A89X™	1.3	RR2X	Peking	7	7	5	6
P16A84X™	1.6	RR2X	PI88788	8	7	6	5
P18A98X™	1.8	RR2X	PI88788	7	7	5	6
P19A14X™	1.9	RR2X	Peking	7	8	5	5
P20A22X™	2.0	RR2X	PI88788	7	8	6	3
P21A28X™	2.1	RR2X	Peking	7	8	6	5
P24A80X™	2.4	RR2X	PI88788	8	7	5	5
P28A42X™	2.8	RR2X	PI88788	7	7	5	5
P29A25X™	2.9	RR2X	PI88788	7	7	5	6
CONVENTIONAL							
P07A10™	0.7	-	PI88788	6**	8	7	6
P11A10™	1.1	-	PI88788	6	7	4	6
P11A50™	1.1	-	PI88788	7	8	4	4
P15A20™	1.5	-	PI88788	7	8	5	5
P21A20™	2.1	-	PI88788	6	7	6	5
P26A10™	2.6	-	PI88788	6	7	6	5
NEW P26A20™	2.6	-	PI88788	7**	8	5**	5

NEW = NEW product

Phytophthora Resistance Gene [7]	Phytophthora Field Tolerance [8]	White Mold [9]	Flower Color [10]	Pod Color [11]	Pubescence Color [12]	Hila Color [13]
1c	5	3**	P	TN	G	BF
-	4	5**	P	TN	G	Y
-	6	4**	W	TN	G	BF
-	6	4	P	BR	G	IB
1k	5**	4	P	BR	L	BL
1k	4**	5	P	BR	L	BL
1c	5**	3**	W	TN	L	BR
1k	4**	5**	P	BR	L	BL
1k	4**	5**	P	BR	L	BR
1k	5**	4**	P	BR	L	BL
1k,3a		4**	P	TN	L	BL
1k	3**	2**	P	BR	L	BR
1c	4	4	P	BR	L	BL
1k,3a		4	W	BR	L	BR
1k	7	5	P	BR	L	BL
1k	4	5	P	BR	L	BL
1k	5	6	P	BR	L	BR
1k	5	6	W	BR	L	BL
1k	6	5	P	BR	L	BR
1c	4	6	P	BR	G	BF
1k	5	5	P	TN	L	BR
1c	5	6	P	BR	G	BF
1k	5	4	P	BR	L	BL
1k	6	6	P	BR	G	IB
1c	6	6	P	BR	G	IB
1k	4	4	P	BR	G	BF
1k,3a		6	P	TN	L	BL
1k	5	6	P	BR	L	BL
1k	5	6	P	BR	L	BL
1k	4	5	P	TN	L	BR
1k	5	6	P	BR	L	BR
1c	7	4**	P	BR	G	Y
3a		4**	P	BR	G	Y
1k	5	5**	W	TN	G	Y
1c	7	7**	P	BR	G	Y
1c	5	4	W	BR	G	Y
1c	6	5	P	BR	L	BR
1k	4	5	P	BR	L	TN

FEATURED PRODUCTS

P17A87E™ NEW

- Versatile product with good agronomics to replace P16T05E™. Average plant height.

P18A73E™ NEW

- Versatile, late Group I leader with a good trait package. Peking source for SCN resistance and average white mold tolerance.

P21A53E™ NEW

- Offensive product with broad adaptation and highly suitable for early planting.

P23A40E™ NEW

- Versatile-to-defensive product with above average plant height and competitive white mold tolerance.

P25A16E™ NEW

- Offensive-to-versatile mid-Group II product. Peking source for SCN resistance, competitive white mold tolerance and excellent standability.

P19A27PR™ NEW

- Competitive yield potential with very good standability and acceptable defensive trait package.

P21A31PR™

- Short stature and very good harvest standability makes it highly suitable for productive soils.

P22A36PR™

- Very good early planting option with strong emergence.

P24A46PR™ NEW

- Offensive-to-versatile product with very good standability and competitive white mold tolerance. Peking source for SCN resistance.

LUMIGEN® SEED TREATMENTS

For Pioneer® Brand Corn

PREMIUM PACKAGE

LumiGEN® seed treatments for corn protect our elite genetics from early-season disease, insects and nematodes to help maximize yield potential.

- The fungicide seed treatment is the most robust available in the industry providing enhanced protection against resistant Pythium species and a new active ingredient against Rhizoctonia (inpyrfluxam).
- Lumialza® nematicide seed treatment shields roots with an expanding bio-barrier protecting corn from yield-robbing nematodes for more than 80 days while cooperating with beneficial microorganisms.

PROTECTION

Diseases:	Insects:	Nematodes:
Pythium	Wireworm	Sting
Fusarium	White grub	Needle
Rhizoctonia	Black cutworm	Lance
Penicillium	Fall armyworm	Stubby-root
Aspergillus	Seed corn maggot	Root-knot
Seedborne disease	Billbug	Dagger
	And more...	Lesion

	PREMIUM PACKAGE	ENHANCED CORN ROOTWORM PACKAGE
FUNGICIDE SEED TREATMENT		
Lumiscend™ Pro (inpyrfluxam, ethaboxam, metalaxyl)	✓	✓
Ipconazole	✓	✓
L-2012 R biofungicide	✓	✓
INSECTICIDE/NEMATICIDE SEED TREATMENT		
Lumivia® 250	✓	
Lumisure® 250	✓	
Lumialza® nematicide	✓	✓
Lumisure® 1250		✓

Lumialza Advantage over FST/IST

9.0 bu/a YIELD ADVANTAGE[1] **in high nematode pressure**

3.7 bu/a YIELD ADVANTAGE[1] **in low nematode pressure**

- Shields against harmful nematodes while cooperating with beneficial soil organisms
- 80+ days of root growth protection

Untreated | **LumiGEN® seed treatments**

ENHANCED CORN ROOTWORM PACKAGE

Brings the same disease and nematode protection as our Premium Package above with Lumisure® 1250 insecticide seed treatment to provide enhanced yield protection against corn rootworm.

PROTECTION **Insects:** Corn Rootworm, Wireworm, White grub, Black cutworm, Seed corn maggot, Bill bug, And more...

Lumisena™ FUNGICIDE SEED TREATMENT | Lumivia® INSECTICIDE SEED TREATMENT | Lumialza™ NEMATICIDE SEED TREATMENT | Lumiderm™ INSECTICIDE SEED TREATMENT | Lumiscend™ Pro FUNGICIDE SEED TREATMENT | ILEVO® Seed Treatment

[1] Lumialza® nematicide seed treatment vs. non-nematicide seed treatment utilizing the same insecticide and fungicide recipe in seed applied technology replicated and strip trial data. Yields ranged from 3 to 9 bu/a depending on nematode species and population, in 184 low stress and 54 moderate to high stress locations.

[2] Data is based on 638 head-to-head comparisons between Lumisena fungicide seed treatment (0.568 fl oz/cwt) and metataxyl (0.75 fl oz/cwt) in the top 10 soybean-producing states through Dec. 12, 2017, and subsequent replicated trials in 2018, 2019 and 2020. Comparisons were made utilizing the same soybean variety. DO NOT USE THIS OR ANY OTHER DATA FROM A LIMITED NUMBER OF TRIALS AS A SIGNIFICANT FACTOR IN PRODUCT SELECTION.

[3] Data is based on average of comparisons in Pioneer Agronomy Science trials from 2012-2015 at 165 locations.

[4] Significant yield improvement and reduction in plant stand gaps based on Corteva Agriscience research data 2018-2019, 73 locations.

[5] Data based on Corteva Agriscience research data 2019-2021, 82 locations.

The foregoing is provided for informational use only. Please contact your Pioneer sales professional for information and suggestions specific to your operation. Product performance is variable and depends on many factors such as moisture and heat stress, soil type, management practices and environmental stress as well as disease and pest pressures. Individual results may vary.

Lumiderm®, Lumivia®, Lumisena® may not registered for sale or use in all states. Contact your state pesticide regulatory agency to determine if a product is registered for sale or use in your state. Always read and follow label directions.

For Pioneer® Brand Soybeans

PREMIUM PACKAGE

Our powerful combination of 6 different modes of action enhanced by Lumisena® fungicide seed treatment leads the industry in yield protection against early-season diseases.

- Lumisena offers best in class protection against the number one early-season disease in soybeans, Phytophthora.
- Multiple modes of action against Pythium, Rhizoctonia, Fusarium and Phomopsis with EverGol® Energy fungicide and L-2030 G biofungicide helps maximize yield with healthy uniform stand establishment.

PROTECTION **Diseases:** Phytophthora, Pythium, Fusarium, Rhizoctonia, Phomopsis

INSECTICIDE PACKAGE

Broader than "FST alone" for pest protection, including early season insects.

- Lumiderm® insecticide seed treatment reduces plant stand gaps and has 2X increase in insect control, adding cutworms, white grubs, thrips and wireworms over Gaucho® seed treatment.[4]
- Two modes of action with Gaucho® and Lumiderm® seed treatment combined to provide broad spectrum insect protection, early vigor and uniform stands.
- Multi-year research data shows a 1-3 bushel yield improvement by adding Lumiderm® seed treatment.[5]

PROTECTION **Insects:** Bean leaf beetle, Early season aphid, Seed corn maggot, Cutworms, White grub, Wireworm, Thrips

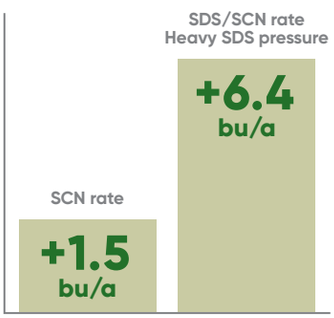
OPTION TO ADD TO ANY PACKAGE

ADD ILEVO® HL SEED TREATMENT

Two rates of extra protection for fields at risk to soybean cyst nematode (SCN) and sudden death syndrome (SDS)

- at lower rate – protection against SCN
- at higher rate – protection against SCN and SDS

ILEVO® seed treatment[3]



	PREMIUM PACKAGE	INSECTICIDE PACKAGE
FUNGICIDE SEED TREATMENT		
Lumisena®	✓	
EverGol® Energy (metalaxyl, penflufen, prothioconazole)	✓	
L-2030 G biofungicide	✓	
INSECTICIDE SEED TREATMENT		
Gaucho®		✓
Lumiderm®		✓

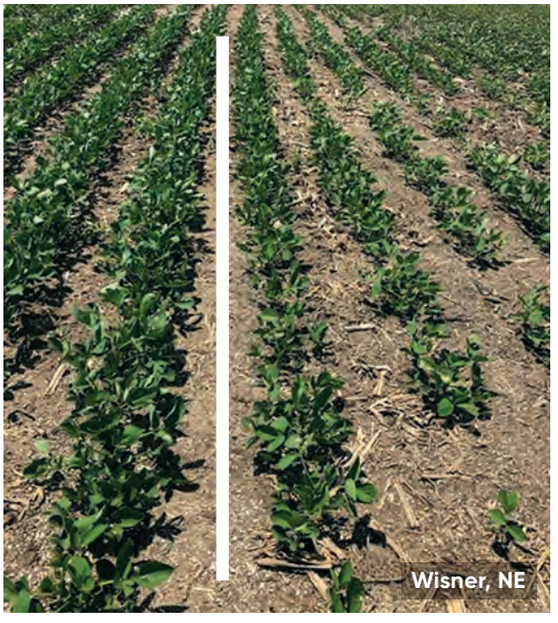
Lumisena Advantage over FST/IST

Best-in-class protection against Phytophthora

4.0 bu/a YIELD ADVANTAGE[2]
in high stress environments vs. high rate metalaxyl

1.0 bu/a YIELD ADVANTAGE[2]
benefit across the farm vs. high rate metalaxyl

Seed Corn Maggot Pressure



Lumiderm® + Gaucho® seed treatment | **Gaucho® seed treatment**

ALFALFA

Variety or Brand*	Herbicide Resistance [1]	Forage Yield [2]	Fall Dormancy [3]	Winterhardiness [4]	Stand Persistence [5]	Standability or Lodging Resistance [6]	Relative Forage Quality (RFQ) [7]	Disease Resistance Index [8]	Aphanomyces Root Rot (Race 1)	Aphanomyces Root Rot (Race 2)	Bacterial Wilt	Phytophthora Root Rot
MUSCLE/HIGH YIELD VARIETIES WITH ROUNDUP READY® TRAIT												
INTRO **54VR12**	RR	9	4	8	9	7	7	9	9	9	8	9
54VR10	RR	9	4	8	9	7	7	9	9	9	9	9
55VR08	RR	9	5	8	8	7	7	9	9	8	8	8
CONVENTIONAL MUSCLE/HIGH YIELD VARIETIES												
54VQ52		9	4	8	9	7	8	9	8	8	8	9
54Q29		9	4	8	9	7	8	9	9	7	9	9
FORAGE QUALITY VARIETIES												
INTRO **54HVX43+**	RR	8	4	8	9	7	9+	9	9	8	9	8
54HVX41+	RR	7	4	8	8	6	9+	8	8	5	8	9
NEW **54Q16†**		8	4	8	8	8	9	9	9	8	9	9
POTATO LEAFHOPPER RESISTANT VARIETY												
55H96^		9	5	8	9	7	7	9	9	9	9	9
PREMIUM DORMANT BLENDS												
INTRO **54BR65™**	RR	7	4	8	8	8	7	7	8	6	8	8
54B66™		7	4	8	7	7	7	7	7	5	8	8

Roundup Ready ALFALFA HARVXTRA with Roundup Ready Technology

* All Pioneer products are varieties unless designated with brand, in which case it is comprised of more than one variety.

^ Forage yield scores based on trials experiencing moderate to heavy leafhopper infestation, with no insecticide applied.

\+ Varieties with HarvXtra® technology (reduced lignin trait) will have significantly higher RFQ values than varieties developed using conventional breeding techniques when harvested on the same date.

† Forage yield scores reflect the yield increase compared to standard alfalfa types under one or more lodging events at harvest.

Trait Scores (**9** = Outstanding; **1** = Poor; Blank = Insufficient Data, unless otherwise noted are based upon period-of-years testing against other Pioneer® brand products through 2021. Pest resistance, dormancy and winterhardiness ratings based on standard test protocols prescribed by the North American Alfalfa Improvement Conference (NAAIC). Ratings may change over additional years of data collection, or if NAAIC protocols change. Scores are assigned by Pioneer Agronomists and Research Managers from research data across a range of climates and growing conditions and may not predict future results. Variety responses are variable and subject to any number of environmental, disease and pest pressures. Please use this information as only part of your product positioning decision. Refer to www.pioneer.com or contact a Pioneer sales professional for the latest and most complete listing of traits and scores for each Pioneer brand product.

[1] **HERBICIDE RESISTANCE: Do not export Pioneer® brand alfalfa seed or crops containing Roundup Ready® alfalfa technology including hay or hay products to China pending import approval. In addition, due to the unique cropping practices, do not plant this product in Imperial County, California.** Purchase and use of HarvXtra® alfalfa with Roundup Ready® technology is subject to a Seed and Feed Use Agreement. **Always Read and Follow Pesticide Label Directions.** Alfalfa with the Roundup Ready® technology provides crop safety for over-the-top applications of labeled glyphosate herbicides when applied according to label directions. Glyphosate agricultural herbicides will kill crops that are not tolerant to glyphosate. **ACCIDENTAL APPLICATION OF INCOMPATIBLE HERBICIDES TO THIS VARIETY COULD RESULT IN TOTAL CROP LOSS.**

HarvXtra® is a registered trademark of Forage Genetics International, LLC.

HarvXtra® alfalfa with Roundup Ready® technology is enabled with Technology from Nobel Research Foundation Institute, LLC.

Roundup Ready® is a registered trademark of Bayer Group, used under license.

[2] **FORAGE YIELD:** Scores are assigned based on period-of-years testing from 2012 through 2021 and includes data from Corteva Agriscience research trials in CA, ID, MN, NY, OH, and WI and from University trials in CA, ID, MI, MN, NY, OH, OR, PA, WI, and ON, Canada.

[3] **FALL DORMANCY:** Fall dormancy class ratings based on standard test protocols of the NAAIC. **1** = Very fall dormant, **11** = Non-dormant.

[4] **WINTERHARDINESS:** Ratings based on comparison to standard check varieties and research observations over the life of the stand.

[5] **STAND PERSISTENCE:** Rating based on observations taken at end of stand life representing plant appearance and stand integrity.

[6] **STANDABILITY OR LODGING RESISTANCE:** Score based on plant lodging observations in multiple environments.

[7] **RELATIVE FORAGE QUALITY (RFQ):** Scores based on forage analysis of plant samples collected in multiple environments.

[8] **DISEASE RESISTANCE INDEX (DRI):** Index based on average resistance scores for seven key pests: Bacterial wilt, Verticillium wilt, Fusarium wilt, Anthracnose, Phytophthora and Aphanomyces (Race 1) and Aphanomyces (Race 2).

NEW = NEW product **INTRO** = Introductory product. Quantities may be limited.

	INOCULANTS			RAPID REACT® TECHNOLOGY			NUTRIVAIL® FEED TECHNOLOGY		
	1174	**1189**	**11H50**	**11C33**	**11B91**	**11G22**	**11CFT****	**11AFT****	**11GFT****
Crop-specific options using patented, proprietary bacterial strains	Multi-Crop	HMC	Alfalfa	Corn Silage	HMC	Alfalfa/ Grass/ Cereal	Corn Silage	Alfalfa	Grass/ Cereals
				Contains fast-acting* *L. buchneri*†	Contains fast-acting* *L. buchneri*†	Contains fast-acting* *L. buchneri*†	Contains *L. buchneri*†	Contains *L. buchneri*†	Contains *L. buchneri*†
Improves fermentation and reduces dry matter loss	X	X	X	X	X	X	X	X	X
Improves nutrient conservation	X	X	X	X	X	X	X	X	X
Significantly reduces heating on bunker/pile face				X	X	X	X	X	X
Helps reduce heating in entire TMR				X	X	X	X	X	X
Improves fiber digestibility							X	X	X

* Rapid React® aerobic stability† technology

** Patented, proprietary and unique *L. buchneri* strain found only in Nutrivail® feed technology products proven to improve rate of fiber digestibility.

† Improved aerobic stability and reduced heating is relative to untreated silage. Actual results may vary. The effect of any silage inoculant is dependent upon management at harvest, storage and feedout. Factors such as moisture, maturity, chop length and compaction will determine inoculant efficacy.

IMPORTANT: Information and ratings are based on relative comparisons with other Pioneer® brand forage additives within each specific crop, not competitive products. Information and ratings are assigned by Pioneer Forage Additive Research, based on average performance across area of use under normal conditions, over a wide range of both environment and management conditions, and may not predict future results. Product responses are variable and subject to any number of environmental and management conditions. Please use this information as only part of your product positioning decision. Refer to www.pioneer.com or contact a Pioneer sales professional for the latest and most complete listing of traits and scores for each Pioneer brand product and for product placement and management suggestions specific to your operation and local conditions.

FERMENTATION: Rate and extent of pH decline and the composition of fermentation acids occurring in silage.

NUTRIENT CONSERVATION: Retaining more sugar/starch and reducing protein degradation by rapidly reducing silage pH.

FIBER DIGESTIBILITY: The digestibility of neutral detergent fiber (NDF) by the ruminant animal expressed as a percentage of the total NDF.

PIONEER® BRAND INOCULANTS

Maximize your forage performance with Pioneer® brand crop-specific inoculants, including proprietary bacterial strains that deliver rapid fermentation, reduce dry matter losses and improve stability in the storage structure and feed bunk.

11F35

Multi-crop Inoculant Intended for use on whole-plant corn, legume and cereal silages. The proprietary strains of Lactobacillus plantarum and Enterococcus faecium in 11F35 have been specifically selected to have a rapid growth rate with an excellent acid tolerance. These strains rapidly reduce the pH in alfalfa and whole plant corn silage, which has been shown to be important in the preservation and conservation of ensiled forage, helping to decrease fermentation and spoilage losses in tower, bunker or bag silos.

WHEAT

Variety	Heading Date North [1]	Yield for Primary Area	Test Weight	Seed Size [2]	Lodging Resistance	Height [3]	Winterhardiness	Leaf Blight	Leaf Rust	Stripe Rust	Powdery Mildew	Scab	Spindle Streak Mosaic Virus	Soil-borne Mosaic Virus	Flour Yield Score	Flour Softness Score	Gluten Strength Score	Hessian Fly [4]	Head Type
NORTHERN RED WHEAT VARIETIES																			
25R25	+1	8	5	7	6	5	7	6	4	6	7	6	6	5	6	5	3	S	Awned
	An awned, later maturity leader variety with outstanding yield over eastern regions. Impressive overall disease package with very good resistance to head scab and winterhardiness.																		
INTRO **25R29**	+1	9	9	8	7	6	7	6	4	3	6	7	7	6	5	6	4	R	Awned
	Strong yield potential with exceptional test weight. Good Fusarium head scab resistance.																		
25R40	0	9	7	8	7	2	5	5	5	8	8	4	6	6	5	7	5	S	Awned
	A short, broadly-adapted, high-yielding variety with very good test weight. May benefit from timely application of fungicide when conditions favor Fusarium head scab infection.																		
25R50	+1	7	6	3	8	3	6	6	7	7	7	7	6	5	3	5	2	R	Awnless
	An awnless, medium-maturity variety with good top-end yield potential under high management practices. Good test weight and lodging resistance make this variety well-adapted to eastern soils.																		
INTRO **25R64**	-0.5	9	5	6	7	5	7	5	4	7	8	6	8	7	6	7	3	MS	Awned
	New elite wheat variety with very good standability. Manage test weight with timely harvest.																		
NEW **25R76**	-1.5	9	8	6	6	5	5	7	5	6	6	7	7	7	6	7	4	MR	Awned
	This new early-season leader is a great choice for early harvest acres. Improved yield potential with very good head scab resistance.																		
NORTHERN WHITE WHEAT VARIETY																			
NEW **25W37**	+2	9	7	4	8	3	7	5	7	7	8	6	7	7	6	8	6	MR	Awned
	Offers high yield potential with strong disease traits into the white wheat line-up. Favorable winterhardiness, strong test weight and solid lodging resistance round out a great agronomic package.																		

Trait ratings provide key information useful in selection and management of Pioneer® brand products in your area. Scores are based on period-of-years testing through 2021 harvest and were the latest available at time of printing. Some scores may change during the 2022 season. Contact your Pioneer sales professional before planting for the latest trait rating information.

IMPORTANT: Information and ratings are based on comparisons with other Pioneer® brand products, not competitive products. Information and ratings are assigned by Pioneer Agronomists and Research Managers, based on average performance across area of adaptation under normal conditions, over a wide range of both climate and soil types, and may not predict future results. Product responses are variable and subject to any number of environmental, disease and pest pressures. Please use this information as only part of your product positioning decision. Refer to www.pioneer.com or contact a Pioneer sales professional for the latest and most complete listing of traits and scores for each Pioneer brand product and for product placement and management suggestions specific to your operation and local conditions.

NUMERIC RATINGS: 9 = Excellent; **1** = Poor; Blank = Insufficient Data.

[1] **HEADING DATE IN AREAS OF ADAPTATION:** Heading date in days earlier (-) or later (+) than Pioneer brand variety:
25R40 in northern states of DE, NJ, NY, PA, OH, IN, MI, IL, MO, WI, and Ontario, Canada.
25R40 in northern white wheat states of MI, NY and Ontario Canada.

[2] **SEED SIZE:** Low scores = smaller

[3] **HEIGHT:** Low scores = shorter

[4] **HESSIAN FLY: R** = Resistant/Tolerant, **MR** = Moderately Resistant/Tolerant, **MS** = Moderately Susceptible/Some Tolerance, **S** = Susceptible, in the primary area of adaptation. Genetic resistance/tolerance does not guarantee complete protection against all biotypes of Hessian fly. Growers should always follow sound insect management strategies, such as crop rotation, optimal planting date, scout fields for fly and apply insecticides as necessary for most effective control. Varietal reaction to Hessian fly was based on specific biotype screening tests as well as field screening for tolerance to predominant biotypes. Predominant biotypes may vary by region and change by season.

NOTE: U.S. patents, Plant Variety Protection Act (PVPA) applications and certificates or other limitations on use may be used to protect Pioneer brand wheat varieties from unauthorized growing, selling or use of the seed. Purchaser of a Pioneer brand wheat variety is granted a limited license solely to produce a single crop of grain for feeding or processing.

NEW = NEW product **INTRO** = Introductory product. Quantities may be limited.
Not all products are available in all areas.

OUR PORTFOLIO OF SEED SOLUTIONS

Crops with incorporated pest and herbicide resistance help farmers maximize the potential of their seed along with our seed-applied technology that helps protect seed from pests and diseases. For more information, visit Pioneer.com.

PIONEER® BRAND QROME® PRODUCTS

Multiple modes of action allow Pioneer® brand Qrome® products to defend against above- and below-ground pests while delivering enhanced yield potential across a broad range of industry-leading genetic Pioneer platforms.

PIONEER® BRAND A-SERIES ENLIST E3® SOYBEANS

Pioneer® brand A-Series Enlist E3® soybeans are exclusive next-generation varieties that combine the world-class Pioneer genetics of A-Series soybeans, the company's highest-yielding varieties, with Enlist E3® soybean technology, the most advanced and fastest-growing trait technology available in soybeans. Only Pioneer can deliver the Enlist E3 trait with the total package of locally proven genetics with best-in-class yield potential and agronomics across a wide range of maturities, while gaining all advantages of the Enlist® weed control system. It's an Enlist E3 soybean, like no other!

PIONEER® BRAND PLENISH® HIGH OLEIC SOYBEANS

Exclusively available from Pioneer, Plenish® high oleic soybeans deliver elite genetics with high yield potential resulting in a healthier soybean oil that has become the industry standard among processors and end users. Plenish high oleic soybeans offer farmers a profitable value-added product designed to meet high consumer and food industry demand and boost market opportunities.

BOVALTA™ BMR CORN SILAGE

Meet BMR hybrids that are the product of Corteva Agriscience extensive research and testing network. They have earned the highest standard for digestibility and milk production[1,2] and demonstrate outstanding performance in yield, disease resistance and agronomics[3,4]. With 6-8 points higher NDFD30 compared to non-BMR[1] checks and one ton per acre higher silage yield potential compared to BMR hybrids sold today[2].

[1] Corteva Agriscience. Research studies of NDFD. Data on file, 2021.

[2] Gencoglu, Hidir, Joe Lauer, and Randy Shaver. "Brown Midrib Corn Silage for Lactating Dairy Cows: A Contemporary Review." University of Wisconsin-Madison, Departments of Dairy Science and Agronomy, January 2008.

[3] Corteva Agriscience. Comparisons of BMR corn hybrid yield. Data on file, 2021.

[4] Corteva Agriscience. Comparisons of disease resistance ratings. Data on file, 2021.

CROP PROTECTION SOLUTIONS

Crop protection products from Corteva Agriscience give farmers the power to fight weeds, diseases, insects and nematodes. From the moment that seed goes in the ground, these crop protection products are working to give the plant an environment in which to thrive.

Farmers who fund a TruChoice® account can save on more than 100 leading Corteva Agriscience™ brand crop protection products. Rewards can be easily tracked and managed online and savings are immediate; no need to wait for rebates to show up in the mail.

Whether postemergence or preemergence, Corteva Agriscience has the right mix of products, modes of action and residuals to give farmers a complete program approach to weed control.

CORN

Resicore®

HERBICIDE

- Strong residual control and versatile application timing at preemergence, postemergence or in a split application
- Controls more than 75 high-anxiety broadleaf weeds and grasses, including waterhemp, marestail and Palmer amaranth
- Formulated with three modes of action in order to provide superior control of the toughest weeds

CORN

Resolve® Q

HERBICIDE

- Delivers consistent postemergence control of several grass and broadleaf weeds in corn, such as morningglory, common lambsquarters and velvetleaf, when tank mixed with glyphosate
- Built-in safener technology that provides the flexibility to apply under diverse weather conditions, across more hybrids and with a wide range of adjuvants

CORN

Keystone® NXT

HERBICIDE

- Consistent control of a wide-spectrum of grasses and small-seeded broadleaf weeds
- Can be applied alone or tank mixed with many pre- and postemergence corn herbicides
- Powered by two modes of action and needs only ¼ inch of rain for activation

Keystone® NXT is a Restricted Use Pesticide.

SOYBEAN

Surveil®

HERBICIDE

- A premix formulation with excellent mixing and handling characteristics
- Proven preemergence weed control growers count on to fight resistant and hard-to-control grasses and broadleaf weeds
- Short plant-back intervals for key rotational crops

SOYBEAN

Trivence®

HERBICIDE

- Powered by three modes of action, providing both burndown and extended residual activity on a broad spectrum of broadleaf weeds
- Flexible in multiple environments, including in cool, wet spring conditions
- Combination of active ingredients keeps fields clean well after soybean planting to support uniform crop emergence

FUNGICIDES

Aproach®

Onmira™ active

FUNGICIDE

- Offers unique movement properties for fast and complete coverage against yield-robbing diseases in row crops
- Provides excellent control of diseases like soybean white mold when utilized as a part of an integrated pest management program
- Tank mix-compatible with various insecticides and herbicides for full protection

SOYBEAN

Enlist One®

COLEX•D® technology

HERBICIDE

- For use with Enlist E3® soybeans, tankmix Enlist One® with qualified herbicides to bring more sites of action on weeds and exceptional control of resistant and hard-to-control broadleaf weeds
- Flexibility to customize your weed control program to fit each farm
- On-target application – 90% less drift than traditional 2,4-D; and 96% less volatile the 2,4-D ester

NITROGEN STABILIZERS

Instinct NXTGEN®

Optinyte™ technology

NITROGEN STABILIZER

- Instinct NXTGEN® nitrogen stabilizer powered by Optinyte® technology is proven by more than a 1,000 field trials and university research to maximize yield and profit potential
- For use with urea, UAN and liquid manure applications
- Extends nitrogen availability in the soil for up to 8 weeks, keeping the ammonium form of nitrogen available during critical growth stages
- Works below ground, where up to 70% of nitrogen loss can occur through leaching into the ground and denitrification into the atmosphere

Granular

PLAN TODAY FOR BIN-BUSTING YIELDS IN 2023

START YOUR PLAN TODAY

GROW CONFIDENTLY

ANALYZE YOUR RESULTS

SCAN FOR MORE DETAILS ON OUR PROGRAMS AND OFFERINGS

Upload Data and Create your crop plans:

- **Data Connectivity & Upload:** A single place to store, visualize, and utilize data captured in the field
- **Field-by-Field Seeding & Crop Plans:** Create crop plans including variety, crop protection, fertility and customized flat or variable rate seeding based on yield targets
- **Soil Fertility & Nutrient Management:** Receive customized soil fertility recommendations that optimize your fertilizer budget to areas of greatest profitability from your certified services agent

Collaborate and identify in-field issues faster:

- **Field Notes & Observations:** Share actionable and timely field notes, threat observations and yield estimates
- **Directed Scouting:** Near daily, high resolution satellite imagery and Scout Priority emails so you can detect issues before they become problems
- **Nitrogen Management:** Options for flat rate and variable recommendations with seasonal monitoring to mitigate the risk of uncertain weather conditions and get the most out your nitrogen budget

Compare multiple variables' impact on yield and profit:

- **Agronomic & Financial Summary:** See how you performed - field by field, variety by variety and across soil types to get to the root of what's possible by analyzing:
  - harvest moisture
  - seed selection
  - soil type
  - planting date and more
- **Reporting:** Ready-to-use reports covering field history, growing season (crop stage, weather) and end-of-season summary

Glyphosate Tolerant

STS® herbicide tolerant trait

ROUNDUP READY 2 XTEND SOYBEANS

Enlist E3 SOYBEANS

plenish High Oleic Soy

SOYBEAN FOOTNOTES

* All Pioneer products denoted with ™ are brand names.

** Ratings denoted with a double asterisk (**) reflect preliminary data subject to change when additional data becomes available.

IMPORTANT: Product responses are variable and subject to any number of environmental, disease and pest pressures. Please use this information as only part of your product positioning decision. Individual results may vary.

Trait ratings provide key information useful in selection and management of Pioneer® brand products in your area. Scores are based on testing through 2021 harvest and were the latest available at time of printing. Some scores may change after 2022 harvest. Information and ratings are based on average performance across area of adaptation under normal conditions, over a wide range of both climate and soil types and may not predict future results. Refer to www.pioneer.com or contact a Pioneer sales professional for the latest and most complete listing of traits and scores for each Pioneer brand product and for product placement and management suggestions specific to your operation and local conditions.

NUMERIC RATINGS: 9 = Excellent; **1** = Poor; Blank = Insufficient Data or variety not tested for that particular trait.

[1] **RELATIVE MATURITY:** Shows the relative maturity group rating, with the digits preceding the decimal representing the general maturity group, and the digit following the decimal showing relative maturity within the group on a scale of 0 to 9, with 0 early and 9 late. For example, a soybean product with a relative maturity rating of 1.8 would be a late product in Group 1 maturity.

[2] **TECHNOLOGY SEGMENT:**

Always follow grain marketing, stewardship practices and pesticide label directions.
Varieties with the Glyphosate Tolerant trait (including those designated by the letter "R" in the product number) contain genes that confer tolerance to glyphosate herbicides. Glyphosate herbicides will kill crops that are not tolerant to glyphosate.

Varieties with the STS® trait are tolerant to certain sulfonylurea (SU) herbicides. This technology allows post-emergent applications of Synchrony® XP and Classic® herbicides without crop injury or stress (see herbicide product labels). NOTE: A soybean variety with a herbicide tolerant trait does not confer tolerance to all herbicides. Spraying herbicides not labeled for a specific soybean variety will result in severe plant injury or plant death. Always read and follow herbicide label directions and precautions for use.

DO NOT APPLY DICAMBA HERBICIDE IN-CROP TO SOYBEANS WITH Roundup Ready 2 Xtend® (RR2X) technology unless you use a dicamba herbicide product that is specifically labeled for that use in the location where you intend to make the application. IT IS A VIOLATION OF FEDERAL AND STATE LAW TO MAKE AN IN-CROP APPLICATION OF ANY DICAMBA HERBICIDE PRODUCT ON SOYBEANS WITH Roundup Ready 2 Xtend® technology, OR ANY OTHER PESTICIDE APPLICATION, UNLESS THE PRODUCT LABELING SPECIFICALLY AUTHORIZES THE USE. Contact the U.S. EPA and your state pesticide regulatory agency with any questions about the approval status of dicamba herbicide products for in-crop use with soybeans with Roundup Ready 2 Xtend® technology. ALWAYS READ AND FOLLOW PESTICIDE LABEL DIRECTIONS. Soybeans with Roundup Ready 2 Xtend® technology contain genes that confer tolerance to glyphosate and dicamba. Glyphosate herbicides will kill crops that are not tolerant to glyphosate. Dicamba will kill crops that are not tolerant to dicamba. Roundup Ready 2 Xtend® is a registered trademark of Monsanto Technology LLC used under license.

Varieties with Enlist E3® technology (E3): The transgenic soybean event in Enlist E3® soybeans is jointly developed and owned by Corteva Agriscience and M.S. Technologies L.L.C. Enlist Duo® and Enlist One® herbicides are not registered for sale or use in all states or counties. Contact your state pesticide regulatory agency to determine if a product is registered for sale or use in your area. Enlist Duo and Enlist One are the only 2,4-D products authorized for use with Enlist crops. Consult Enlist herbicide labels for weed species controlled. Always read and follow label directions.

Plenish® (P) high oleic soybeans have an enhanced oil profile and are produced and channeled under contract to specific grain markets. Growers should refer to the Pioneer Product Use Guide on www.pioneer.com/us/stewardship for more information.

(-) = Variety does not contain a herbicide resistant gene.

[3] **SCN RESISTANCE SOURCE:** There are three sources of genetic resistance to SCN currently deployed in the marketplace: PI88788; PI548402 (also known as Peking); PI437654 (also known as Hartwig); **R** = Resistant to SCN but the source of that resistance is not yet identified.

[4] **FIELD EMERGENCE:** Rating based on speed and strength of emergence in sub-optimal temperatures. **1-3** = Below Average; **4-6** = Average; **7-9** = Excellent.

[5] **CANOPY WIDTH: 9** = Extremely bushy; **1** = Very narrow.

[6] **PLANT HEIGHT FOR MATURITY: 9** = Tall; **1** = Short.

[7] **PHYTOPHTHORA RESISTANCE GENE:**
(-) = No specific gene for resistance.
Rps 1c = Provides resistance to races 1-3, 6-11, 13, 15, 17, 21, 23, 24, 26, 28-30, 32, 34, 36.
Rps 1k = Provides resistance to races 1-11, 13-15, 17, 18, 21-24, 26, 36, 37.
Rps 3a = Resistant to races 1-5, 8-9, 11, 13-14, 16, 18, 23, 25, 28-29, 31-35, 39-41, 43-45, 47-52, 54…

[8] **PHYTOPHTHORA FIELD TOLERANCE:** Products with high tolerance scores have demonstrated an ability to thrive in the presence of Phytophthora races to which they lack specific resistance. In some products, tolerance is expressed only after the early seedling growth stage, making such products susceptible to damping off during emergence and early seed growth.

[9] **WHITE MOLD:** Scores based on Pioneer research observations of comparative white mold tolerance among various soybean products across multiple locations and years. All products are capable of developing white mold symptoms under severe infestations. To our knowledge, there are no totally resistant products in the industry. However, differences exist in the ability of products to tolerate white mold (i.e., the rate at which the infection develops and the extent of damage it causes). These scores reflect those differences.

[10] **FLOWER COLOR: P** = Purple; **W** = White.

[11] **POD COLOR: BR** = Brown; **TN** = Tan.

[12] **PUBESCENCE COLOR: T** = Tawny; **G** = Gray; **L** = Light tawny; **M** = Mixed.

[13] **HILA COLOR: BL** = Black; **BR** = Brown; **TN** = Tan; **G** = Gray; **IB** = Imperfect black; **BF** = Buff; **Y** = Yellow (Clear); **M** = Mixed.

Note: U.S. patents, Plant Variety Protection Act (PVPA) applications and certificates, or other limitations on use may be used to protect Pioneer brand soybean products from unauthorized growing, selling or use of the seed. These protections help assure that growers will continue to have access to new and improved products through the research efforts of plant scientists in the years ahead.

Granular

PIONEER agronomy

TruChoice

Cinch® ATZ, Lannate® LV, Lannate® SP, FulTime® NXT, Keystone® LA NXT, and Keystone® NXT are Restricted Use Pesticides.

The EPA-registered labels for Lannate LV and Lannate SP contain the following statements: "This product is highly toxic to bees exposed to direct treatment on blooming crops or weeds. Do not apply this product or allow to drift to blooming crops or weeds if bees are foraging in (actively visiting) the treatment area."

Qrome® products are approved for cultivation in the U.S. and Canada. They have also received approval in a number of importing countries, most recently China. For additional information about the status of regulatory authorizations, visit http://www.biotradestatus.com/

The transgenic soybean event in Enlist E3 soybeans is jointly developed and owned by Corteva Agriscience and M.S. Technologies. L.L.C.

Plenish® high oleic soybeans have an enhanced oil profile and are produced and channeled under contract to specific grain markets. Growers should refer to the Pioneer Product Use Guide on www.pioneer.com/us/stewardship for more information.

Enlist Duo® and Enlist One® herbicides are the only 2,4-D product authorized for use in Enlist crops. Not all products are registered for sale or use in all states. Contact your state pesticide regulatory agency to determine if a product is registered for sale or use in your state. FulTime NXT, Keystone LA NXT, Keystone NXT, Resicore®, Stinger® HL and SureStart® II are not available for sale, distribution or use in Nassau and Suffolk counties in the state of New York. State restrictions on the sale and use of Stinger® and Stinger® HL apply. Consult the label before purchase or use for full details. Do not fall-apply anhydrous ammonia south of Highway 16 in the state of Illinois. Always read and follow label directions.

NOTES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