Disease and Pest Resistance Ratings of Pioneer® brand Corn Products for 2023-24**

Hybrid/Brand***	Technology Segment	Market Segment	CRM	Gray Leaf Spot	No. Leaf Blight	So. Leaf Blight	Anthrac. Stalk Rot	Fus. Ear Rot	Gibberella Ear Rot	Diplodia Ear Rot	Mid-Season Brittle Stalk	Goss`s Wilt	Foliar Fungicide Response-GLS	Foliar Fungicide Response-NLB
P0075AM	AM,LL,RR2	HTF	100	5	6		4	4	6	4	6	8	MP	LP
P0075Q	Q,LL,RR2	HTF	100	5	6		4	4	6	4	6	8	MP	LP
P0035AM	AM,LL,RR2	AQ,HTF	100	4	5		5	3	5	4	3	7	HP	MP
P0306AM	AM,LL,RR2	AQ,HAE,HTF	103	4	5	5	4	3	4	5	4	7	HP	MP
P0306Q	Q,LL,RR2	AQ,HAE,HTF	103	4	5	5	4	3	4	5	4	7	HP	MP
P04922Q	Q,LL,RR2	HTF	104	4	6		5	4	5	4	5	6	HP	LP
P0487 *		AQ,HAE	104	5	6		5	4	3	5	6	7	MP	LP
P0487Q	Q,LL,RR2	AQ,HAE	104	5	6		5	4	3	5	6	7	MP	LP
P04511AM	AM,LL,RR2	HTF	104	4	6		7	3	5	4	5	6	HP	LP
P0421AM	AM,LL,RR2	HAE,HTF	104	4	5		3	3	4	4	6	7	HP	MP
P0404AM	AM,LL,RR2	HTF	104	5	5		4	4	4	4	6	6	MP	MP
P0574		AQ,HAE,HTF	105	4	5	4	4	5	3	6	4	5	HP	MP
P0574AM	AM,LL,RR2	AQ,HAE,HTF	105	4	5	4	4	5	3	6	4	5	HP	MP
P0529Q *	Q,LL,RR2	HAE	105	5	6		5	4	5	5	6	6	MP	LP
P0688AM	AM,LL,RR2	HAE,HTF	106	5	4	4	4	4	4	4	6	5	MP	HP
P0732Q	Q,LL,RR2	HAE,HTF	107	5	5	5	6	5		6	6	7	MP	MP
P0720		HTF	107	4	6	4	5	5	4	5	4	7	HP	LP
P0720AM	AM,LL,RR2	HTF	107	4	6	4	5	5	4	5	4	7	HP	LP
P0720Q	Q,LL,RR2	HTF	107	4	6	4	5	5	4	5	4	7	HP	LP
P0720WX		WX,HTF	107	4	6	4	5	5	4	5	4	7	HP	LP
P0859AM *	AM,LL,RR2	HTF,HES	108	5	5	4	5	4	3	5	7	7	MP	MP
P0806AM	AM,LL,RR2	HTF,HES	108	5	5	4	5	3	4	4	5	6	MP	MP
P0995AM	AM,LL,RR2	AQ,HTF	109	5	5	5	5	3		5	5	7	MP	MP
P0977		HAE	109	5	5	3	4	4		5	7	5	MP	MP
P0977AM	AM,LL,RR2	HAE	109	5	5	3	4	4	5	5	7	5	MP	MP
P0953AM	AM,LL,RR2	HTF,HES	109	5	6	5	6	6	3	5	6	6	MP	LP
P0935AM	AM,LL,RR2	HTF,HES	109	5	5	5	6	4		5	5	6	MP	MP
P0934WX		WX,HES	109	5	5	4	5	3	5	6	5	5	MP	MP

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P0924		HAE	109	5	6	5	4	5		4	6	5	MP	LP
P0924Q	Q,LL,RR2	HAE	109	5	6	5	4	5		4	6	5	MP	LP
P0924WX *		WX,HAE	109	5	6	5	4	5		4	6	5	MP	LP
P1099Q	Q,LL,RR2	HTF	110	6	5	4	5	6		5	6	5	LP	MP
P1093		YFC	110	4	6	4	5	4		6	5	6	HP	LP
P10811AM	AM,LL,RR2	HTF	110	5	6	5	5	5		5	7	6	MP	LP
P1077AM	AM,LL,RR2	HTF	110	5	5	5	4	3		5	6	5	MP	MP
P10477Q	Q,LL,RR2	HTF,HES	110	5	6	5	5	4		6	6	6	MP	LP
P1027AM *	AM,LL,RR2	HTF	110	5	6	5	4	5		4	6	5	MP	LP
P1197		HTF,HES	111	5	6	5	6	6	5	5	5	6	MP	LP
P1197AM	AM,LL,RR2	HTF,HES	111	5	6	5	6	6	5	5	5	6	MP	LP
P1197WX		WX,HTF,HES	111	5	6	5	6	6	5	5	5	6	MP	LP
P1185		HTF	111	4	6	4	5	5		4	6	5	HP	LP
P1185AM	AM,LL,RR2	HTF	111	4	6	4	5	5		4	6	5	HP	LP
P1185Q	Q,LL,RR2	HTF	111	4	6	4	5	5		4	6	5	HP	LP
P1170AM	AM,LL,RR2	HTF	111	5	6	5	4	5		4	6	5	MP	LP
P1136AM	AM,LL,RR2	HTF,HES	111	5	5	5	4	4		5	4	6	MP	MP
P1120WAM	AM,LL,RR2	WH,HTF	111	5	5	4	5	5		5	6	7	MP	MP
P1120WQ	Q,LL,RR2	WH,HTF	111	5	5	4	5	5		5	6	7	MP	MP
P1108Q	Q,LL,RR2	HAE,HTF	111	5	5	5	4	6	4	6	6	7	MP	MP
P1278Q	Q,LL,RR2	HTF,HES	112	6	4	5	5	5		6	6	6	LP	HP
P1222 *		HTF	112	5	5	5	5	5		6	4	6	MP	MP
P1222AM	AM,LL,RR2	HTF	112	5	5	5	5	5		6	4	6	MP	MP
P1213AM	AM,LL,RR2	YFC,HTF	112	5	6	5	5	5		5	5	5	MP	LP
P1383AM *	AM,LL,RR2	HTF	113	5	6	6	5	5		5	7	6	MP	LP
P1380AM	AM,LL,RR2	HTF	113	5	6	5	5	4		5	6	4	MP	LP
P1366AM	AM,LL,RR2	HTF	113	4	6	4	5	4		5	7	6	HP	LP

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P1359 *		HTF,HES	113	5	5	5	6	5		5	6	6	MP	MP
P1359AM	AM,LL,RR2	HTF,HES	113	5	5	5	6	5		5	6	6	MP	MP
P1359WX *		WX,HTF,HES	113	5	5	5	6	5		5	6	6	MP	MP
P13131W		WH	113	5	5	5	5	5		6	5	7	MP	MP
P1309WAM	AM,LL,RR2	WH,HAE	113	5	6	4	6	4		5	7	6	MP	LP
P1306W		WH,HTF	113	6	6	6	4	7		6	6	6	LP	LP
P1306WAM	AM,LL,RR2	WH,HTF	113	6	6	6	4	7		6	6	6	LP	LP
P1306WHR	HX1,LL,RR2	WH,HTF	113	6	6	6	4	7		6	6	6	LP	LP
P14830AML	AML,LL,RR2	HTF	114	4	6	5	4	5		5	5	5	HP	LP
P14830Q	Q,LL,RR2	HTF	114	4	6	5	4	5		5	5	5	HP	LP
P1477W		WH,HAE	114	6	6	5	6	6		5	4	8	LP	LP
P1464AML	AML,LL,RR2	HTF	114	5	3	5	4	6		6	5	6	MP	HP
P1457WAM *	AM,LL,RR2	WH	114	5	5	4	4	4		5	5	7	MP	MP
P1442		YFC	114	5	5	4	5	5		5	4	5	MP	MP
P1442AM	AM,LL,RR2	YFC	114	5	5	4	5	5		5	4	5	MP	MP
P1408WAM	AM,LL,RR2	WH	114	5	5	5	5	5		5	6	6	MP	MP
P15784AM	AM,LL,RR2	YFC	115	6	6	5	5	4		5	6	7	LP	LP
P1563AM	AM,LL,RR2	HTF,HES	115	4	6	3	4	4		6	7	7	HP	LP
P1511AM *	AM,LL,RR2	YFC,HTF	115	5	5	5	4	6		5	5	5	MP	MP
P1656W		WH,HTF	116	6	7	4	6	4		4	5	7	LP	LP
P1656WAM	AM,LL,RR2	WH,HTF	116	6	7	4	6	4		4	5	7	LP	LP
P1618W		WH,HAE	116	5	6	4	5	5		5	5	7	MP	LP
P1618WAM	AM,LL,RR2	WH,HAE	116	5	6	4	5	5		5	5	7	MP	LP
P1608AM *	AM,LL,RR2	YFC,HTF	116	5	6	5	4	6		4	5	5	MP	LP
P1790W *		WH	117	5	6	4	5	4		4	6	7	MP	LP
P1742Q *	Q,LL,RR2	HTF	117	5	4	5	4	3		5	6	7	MP	HP

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Hybrid/Brand***	Technology Segment	Market Segment	CRM	Gray Leaf Spot	No. Leaf Blight	So. Leaf Blight	Anthrac. Stalk Rot	Fus. Ear Rot	Gibberella Ear Rot	Diplodia Ear Rot	Mid-Season Brittle Stalk	Goss`s Wilt	Foliar Fungicide Response-GLS	Foliar Fungicide Response-NLB
P1718AML	AML,LL,RR2	HTF	117	5	4	5	4	5		5	6	6	MP	HP

* Introductory product. Quantities may be limited.

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

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

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

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.

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.

TECHNOLOGY SEGMENT: AM1 - Optimum® AcreMax® 1 insect protection system with an integrated corn rootworm refuge solution includes HXX, LL, RR2. Optimum AcreMax 1 products contain the LibertyLink® gene and can be sprayed with Liberty® herbicide. The required corn borer refuge can be planted up to half a mile away. 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. AMT - Optimum® AcreMax® TRIsect® insect protection system with RW,YGCB,HX1,LL,RR2. Contains a single-bag refuge solution for above- and below-ground insects. The major component contains the Agrisure® RW trait, the Bt trait, and the Herculex® I gene. In EPA-designated cotton-growing counties, a 20%

separate corn borer refuge must be planted with Optimum AcreMax TRIsect 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/. YGCB,HX1,LL,RR2 (Optimum® Intrasect®) - Contains the Bt trait and Herculex® I gene for resistance to corn borer. YGCB,HXX,LL,RR2 (Optimum® Intrasect® Xtra) - Contains the Bt trait and the Herculex® XTRA gene for resistance to corn borer and corn rootworm. RW,HX1,LL,RR2 (Optimum® TRIsect®) - Contains the Herculex® I gene for above-ground pests and the Agrisure® RW trait for resistance to corn rootworm. 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. AVBL,YGCB,HX1,LL,RR2 (Optimum® Leptra®) - Contains the Agrisure Viptera® trait, the Bt trait, the Herculex® I gene, the LibertyLink® gene and the Roundup Ready® Corn 2 trait. 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.

Roundup Ready® is a registered trademark used under license from Monsanto Company.

Liberty®, LibertyLink® and the Water Droplet Design are registered trademarks of BASF.

Agrisure® and Agrisure Viptera® are registered trademarks of, and used under license from, a Syngenta Group Company. Agrisure® technology incorporated into these seeds is commercialized under a license from Syngenta Crop Protection AG.

MARKET SEGMENT: Designations indicate product is also suitable for the following market: HAE - High Available Energy (Pork & Poultry Feed); HTF - High Total Fermentables (Dry-Grind Ethanol); HES - High Extractable Starch (Wet Milling); WX - Waxy; WH - White food corn; YFC - Yellow food corn; AQ - Optimum® AQUAmax® product.

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 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.

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.

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.

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

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.

DIPLODIA EAR ROT CAUTION: Ratings based upon visual symptoms at harvest. If Diplodia ear rot has caused significant damage in the past, growers should consider planting only products with a Diplodia ear rot rating of 4 or higher.

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MID-SEASON BRITTLE STALK: Ratings determined by frequency and severity of stalk snappage at lower to middle stalk internodes from conditions usually favored by rapid or optimum growth. Relative response of products can be affected by planting date, stage of growth, rate of growth, wind severity and other variables. Scores derived from both natural observations and artificial evaluation immediately prior to tasseling. NOTE: Scores do not reflect snappage enhanced by or due to herbicide interaction. The use of growth regulator herbicides such as 2,4-D and dicamba can increase the brittle snap potential of corn products. Products with lower brittle stalk ratings will require more caution and have a higher risk associated with the use of growth regulator herbicides. Early application, proper rates and application methods, along with both product and herbicide selection can help reduce this risk. BRITTLE STALK PRECAUTION: In areas with higher potential for brittle stalk breakage, growers must balance the risk of planting products with brittle stalk ratings of less than 4 against the overall performance of more resistant products with higher ratings. All products have a period of susceptibility to brittle stalk. Products with below average ratings may have a longer period of susceptibility, or may experience more severe breakage relative to products with higher scores during period of susceptibility.

FOLIAR FUNGICIDE RESPONSE - GLS: Probability of positive yield response to foliar fungicide applications when significant levels of Gray Leaf Spot (GLS) leaf disease is present. HP - High Probability; MP - Moderate Probability; LP - Low Probability. Probabilities based upon product disease scores. Because of the unlimited number of growing environments, cropping practices, and foliar fungicide active ingredients combinations possible, DuPont Pioneer makes no warranty regarding this foliar fungicide crop response information.

FOLIAR FUNGICIDE RESPONSE - NLB: Probability of positive yield response to foliar fungicide applications when significant levels of Northern Leaf Blight (NLB) leaf disease is present. HP - High Probability; MP - Moderate Probability; LP - Low Probability. Probabilities based upon product disease scores. Because of the unlimited number of growing environments, cropping practices, and foliar fungicide active ingredients combinations possible, DuPont Pioneer makes no warranty regarding this foliar fungicide crop response information.