MERSCHMAN SEEDS®

2023 PRODUCT GUIDE

MERSCHMAN SEEDS®
WEST POINT, IOWA FACILITY

A NOTE FROM JOE MERSCHMAN

NEW INDUSTRY LEADING SOYBEAN SEED TREATMENT ADVANCEMENT

Over the past year, we've been working hard at Merschman Seeds® to raise the yield bar for farmers. We know the challenges you're up against and are dedicated to providing you solutions to get the most out of your fields. Because of that, we predict 2023 will be your best year yet with us.

Here's why. I know for a fact we have the best products. We're an independent, family-owned seed company, allowing us to work for you, the farmer. As a result, it all starts with better, higher-yielding soybean genetics. We have the inside track with our sister company, MS Technologies™, the leading company industry-wide for breeding and licensing Enlist E3® Soybeans.

See for yourself what goes into every bag of Merschman Soybeans on the next page where we discuss the MS Technologies™ breeding effort. It will amaze you just what it takes to be number one. We select the best products to put in a Merschman Seeds' bag. It's that simple. You receive the benefits of world-class genetics and higher yields by working with us.

For 2023, we're offering an all-new, comprehensive seed treatment for soybeans and wheat: Merschman Starting Line Seed Treatment™. With a combination of four fungicides, an insecticide, a biological, three biostimulants and a special seed finisher, Merschman Starting Line is an incredible seed treatment advancement for your farm.

We know how to treat seeds. We've been doing it for over 65 years, ensuring it is done right. For areas especially susceptible to SDS and Soybean Cyst Nematode, we've developed Merschman Seeds® Starting Line Plus™, which combines the powers of Saltro® and Trunemco™.

We produce our seeds in large quantities and manage your order with our sophisticated order and inventory management system. We almost never make substitutions. This gives you peace of mind when you order early, knowing you are going to get exactly what you ordered.

It just does not get better than this. Now you know why Merschman Seeds® is known as Your Friend in the Field® to farmers across the Midwest and Mid-South. Thank you in advance for planting Merschman Soybeans in 2023.

Joe Merschman

CEO & President | Merschman Seeds®
President | MS Technologies™

THE SOYBEAN SELECTION PROCESS

13 GENERATIONS - OVER 6 YEARS

The steps below show the size and scope of our sister company, MS Technologies', breeding company and the complex process to provide the highest yielding products on the market.

STEP 1

Summer & Winter 2021-2022

North America & South America

20,000 Populations are made each year by hand pollinators.

STEP 2

Summer & Winter 2022-2023

F1 and F2 seed is advanced in North America and South America nurseries.

STEP 3

Summer 2023

North America

Bulk Populations Grown, 242,000 Single Plants Selected, These are then reduced based on parental data and characteristics to get the lines for retest trials.

STEP 4

Winter 2023-2024

South America

Retest Single Row Seed Increased, Notes Are Taken.

STEP 5

Summer 2024

North America

Retest Trials, 115,300 lines tested at 68 locations in 2,300 tests and 565,300 plots.

STEP 6

Winter 2024-2025

South America

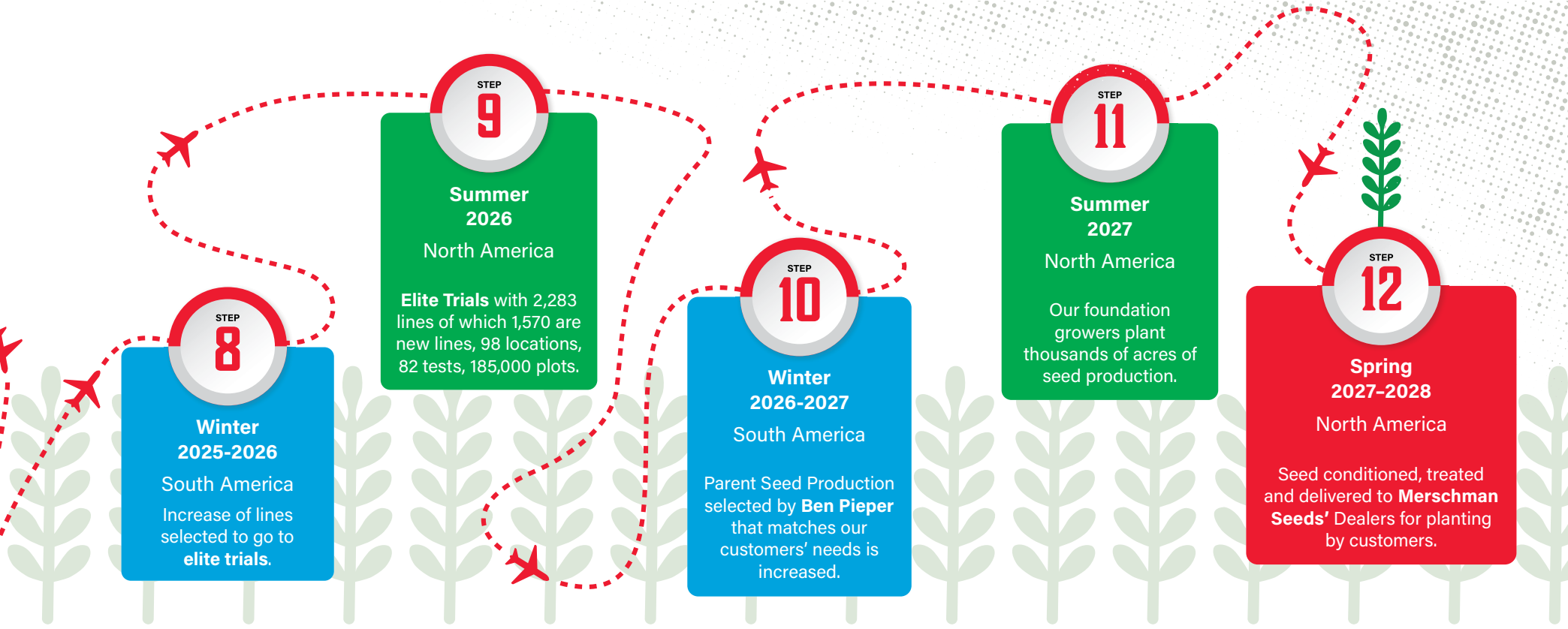
Plant row yield trial seed increased.

STEP 7

Summer 2025-2026

North America

Plant row yield trials, 23,850 lines tested at 78 locations in 477 tests and 238,500 plots.



THE FUTURE OF FARMING

MERSCHMAN SEEDS® IS COMMITTED TO RESEARCH

For decades, we've been the first in line to source the most elite genetics in the industry through our sister company, MS Technologies™. While the Merschman Seeds combination of four fungicides, three biostimulants, an insecticide and a biological creates ideal environments for seeds to flourish, MS Technologies™ starts at the ground level to develop seeds that meet your goals.

MS Technologies™ is dedicated to leading the way in trait and technology innovations for improving the future of farming. Through collaborations with other parties, its portfolio has been leveraged to develop new technologies in support of growers as they enter the next era of farming.

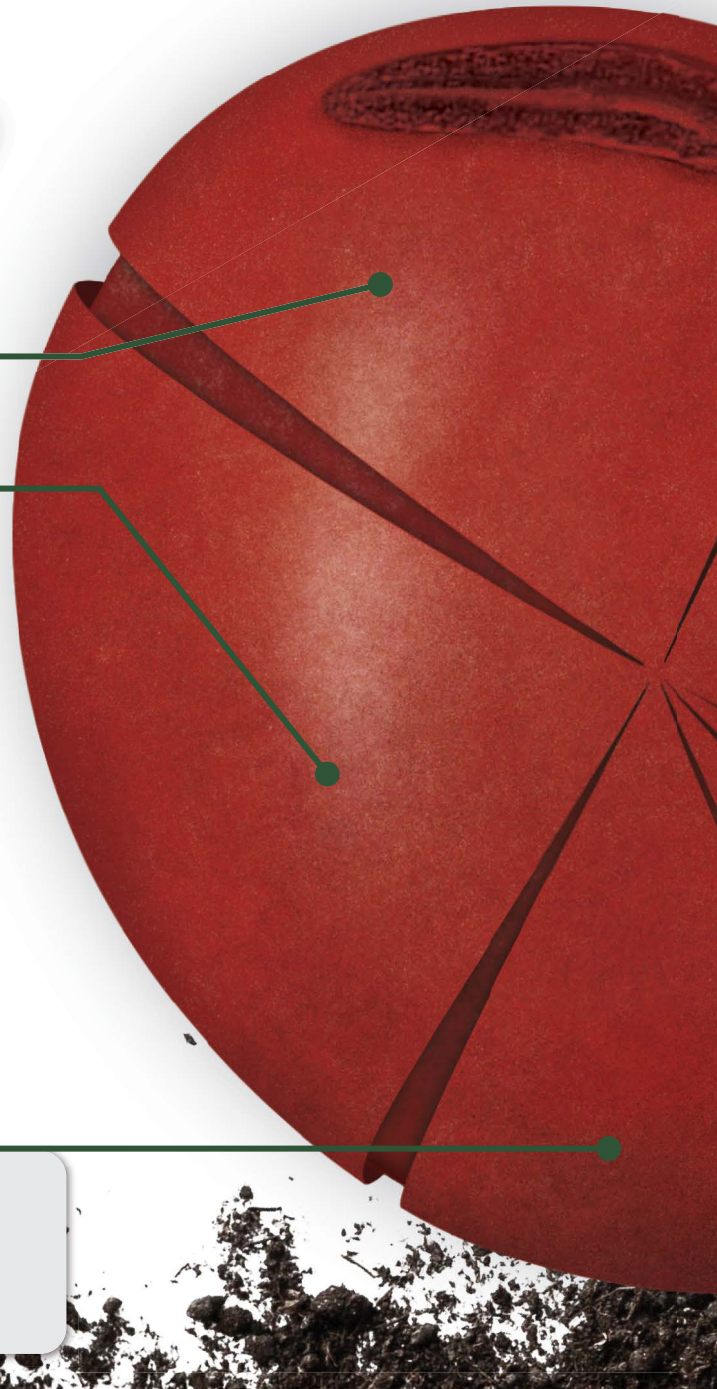
As President of MS Technologies™, Joe Merschman ensures a customer-focused outlook and the best germplasm with the most highly desired traits at a competitive price.

MERSCHMAN SEEDS®

MS Technologies, LLC

SL STARTING LINE™

Set the pace with the most advanced seed treatment paired with superior genetics to assure higher yields.



4 FUNGICIDES

IPCONAZOLE
Rhizoctonia &
Fusarium control.

THIABENDAZOLE
Phomopsis & seedborne
fungi control.

METALAXYL
Pythium & early season
Phytophthora control.

ETHABOXAM
Additional mode of action for
Phytophthora control & resistant
Pythium species

BIOLOGICAL

headsUP® PLANT PROTECTANTS INC.

Systemic Acquired Resistance
(SAR)
Unique mode of action

Stimulates natural defense pathways providing season-long systemic protection against SDS + sclerotinia white mold

Average **+2.08 bu/A** yield increase

**data source: Iowa State University. Dr. X.B. Yang*

INSECTICIDE

IMIDACLOPRID
Overwintering bean leaf beetles, aphids, seedcorn maggots, wire worm & grape colaspis control.

MERSCHMAN SEEDS®

3 BIOSTIMULANTS

HORMONES • AMINO ACIDS • NUTRIENTS

TRIPIDITY® ST

+2.3 bu/A
Average Yield Advantage

Biostimulants increase yield by allowing the crop to perform at an optimal level, even under stress.

Tripidity ST allows each seed to recieve the same emergence message and complete cellular food source at the same time.

5 ESSENTIAL NUTRIENTS

P_2O_5, Mn, B, Fe, Zn

Boost germination and early growth.

BLEND OF PLANT EXTRACTS

Amino Acids, glucose and vitamins induce enzyme activity, enhance germination & early growth.

BALANCED RATIO OF HORMONES

INDOLE-3-BUTRYIC ACID (IBA)
IBA is an auxin that enhances root growth; involved in apical dominance, stimulates cell elongation, enhances fruit and seed development.

CYTOKININ (KINETIN)
Stimulates cell division, involved in shoot growth, delays leaf senescence and activates dormant buds.

GIBBERELLIC ACID (GA)
Stimulates seed germination, shoot elongation, flowering and regulates production of hydrolytic enzymes in grains.

2 SEED FINISHERS

Shiny slick appearance improves plantability.
Polymer helps eliminate dust off.

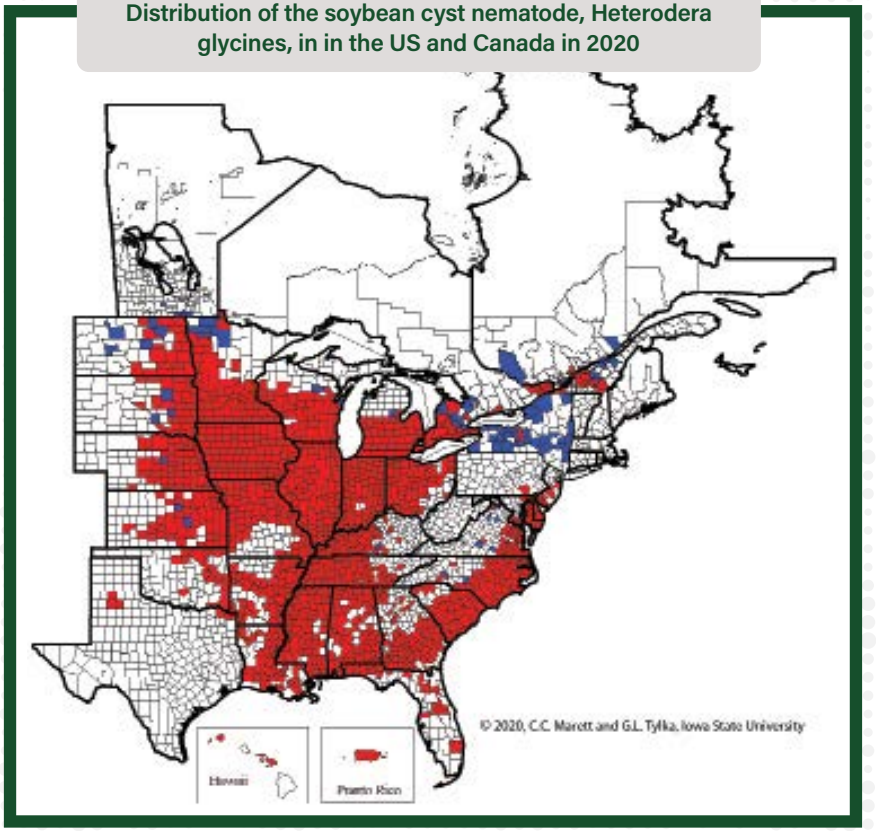
COLORANT

Red color indicates seeds are treated.

DISCOVER BENEFITS OF OPTIONAL ADD-ONS

If your farm is located in the areas mapped out below, add the power of Starting Line Plus™. This add-on combines the powers of Saltro® and Trunemco™ in a highly-effective solution for protection from Sudden Death Syndrome and Soybean Cyst Nematode, all added to our standard Starting Line Seed Treatment™. For 2023, when you order the Saltro® option, you will automatically receive the benefits of Trunemco™ as a standard combination. The new addition of Trunemco™ adds microbial protection from SCN and supports root health and uniform plant growth.

Distribution of the soybean cyst nematode, Heterodera glycines, in in the US and Canada in 2020



Reported Infestation since 2017 Known Infestation in 2017 or before

10% typical yield loss with no above-ground symptoms
50% typical yield loss with severe SCN infestation.

INDUSTRY-LEADING MULTIPLE MODES OF ACTION AGAINST SCN & SDS

Saltro®

HIGHER YIELD POTENTIAL

+4 bushels per acre (bu/A) yield improvement over ILEVO® seed treatment, under SDS pressure.

SUPERIOR SDS PROTECTION

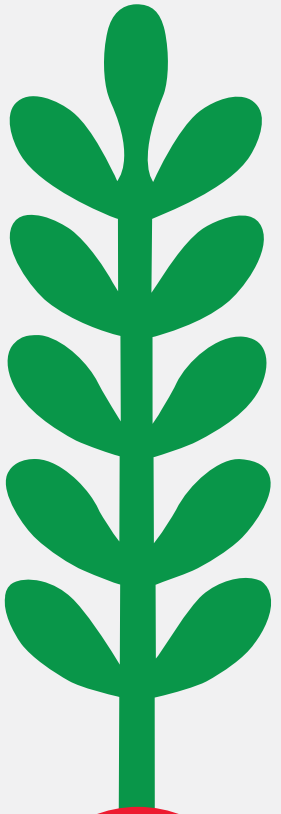
More power to protect the cause of SDS (Fusarium virguliforme).

NO EARLY SEASON PLANT STRESS

Protection from SDS without signs of plant stress, including phytotoxicity, stunting, and susceptibility to pests, weather or herbicide programs.

ABOVE & BELOW GROUND VIGOR

Stronger plant stand and larger root mass for healthier plants above and below ground.



Trunemco™

DUAL MODES OF ACTION

Only seed applied nematicide with dual modes of action; a biological organism paired with a hard chemistry.

STOP NEMATODES

The living organism in Trunemco™ attacks specific body parts of the nematode adults, juveniles and eggs.

PRIME PLANT PHYSIOLOGY

This biochemical primes plant physiology, activating its defenses.

SECURE GENETIC POTENTIAL

Suppression of nematodes with dual modes of action secures soybean's genetic potential against SCN.

SOYBEANS

Enlist E3 SOYBEANS

ENLIST E3®

Glyphosate, Glufosinate,
Enlist One® & Enlist Duo® (2,4-D Choline)

CONVENTIONALS

Industry Leading Non-Traited Germplasm

MERSCHMAN SEEDS

SOYBEANS

READING SOYBEAN NAMES & NUMBERS

‘Arthur’ Denotes the name of the soybean brand.

‘30’ Denotes the Relative Maturity. In this case it would be ‘3.0’

Arthur 2330E

‘23’ Denotes the year that the brand came into the market. In this case it would be 2023.

‘E’ Denotes Enlist E3® If no letter is present, it is a conventional.

GUIDE TO SOYBEAN DESCRIPTIONS

Emergence and Standability:
9 to 1, where 9 = Excellent, 1 = Poorest

Plant Type:
1.0 = Thin (little or no side branching)
1.5 = Thin-Intermediate (occasional side branching)
2.0 = Intermediate (moderate side branching)
2.5 = Intermediate-Bush (substantial side branching)
3.0 = Bush (profuse side branching)

Plant Height:
Short = S,
Medium = M,
Slightly taller than Medium = M+
Medium Tall = M-T
Tall = T

Disease Rating Scale:
9 to 1, where 9 = Excellent, 1 = Poorest.

This applies to tolerance, or disease ratings: Frogeye Leaf Spot, Iron Chlorosis, Charcoal Rot, Sclerotinia, White Mold, Sudden Death Syndrom, Stem Canker, Cercospora Leaf Spot & Blight, Root Knot Nematode, Phytophthora Root Rot, etc.

Brown Stem Rot:
NG = No gene
MR = Moderatly Resistant
R = Resistant
NA = Not Available


ENLIST E3®
Glyphosate, Glufosinate,
Enlist One® & Enlist Duo® (2,4-D Choline)

MERSCHMAN SEEDS

SOYBEANS

Enlist E3 SOYBEANS

SATURN 2312E BRAND

1.2 RM

GREAT FIT FOR ALL SOIL TYPES

- Outstanding SDS tolerance
- Suitable for all soil types
- Above average SWM & IDC
- Yielded 108.6% in 2021 testing

Emergence	8.0
Standability	6.0
Plant Type	2.0
Plant Height	M+
Phytophthora Gene	No Gene (6.0 tol)
Iron Deficiency Chlorosis	6.0
Brown Stem Rot	No Gene
Sclerotinia White Mold	6.0
Sudden Death Syndrome	9.0
Cyst Nematode Race	PI88788 (R3, MR14)

MERCURY 2315E BRAND

1.5 RM

YIELD LEADER IN HIGH PERFORMING ACRES

- Excellent field tolerance to Phytophothora along with Rps3a gene
- Brown Stem Rot tolerance & above average SWM tolerance
- Excels in Iowa, Minnesota & Wisconsin
- Yielded 104.1% in 2021 testing

Emergence	8.0
Standability	7.0
Plant Type	2.0
Plant Height	M
Phytophthora Gene	Rps3a (8.0 tol)
Iron Deficiency Chlorosis	5.0
Brown Stem Rot	R
Sclerotinia White Mold	6.0
Sudden Death Syndrome	7.5
Cyst Nematode Race	PI88788 (R3, MR14)

NEPTUNE 2317E BRAND

1.7 RM

GREAT EARLY FIT FOR ALL SOIL TYPES/ BROADLY ADAPTED EAST TO WEST

- Excellent stress tolerance
- Excellent field tolerance to Phytophthora along with Rps3a gene
- Great SDS tolerance
- Yielded 108.2% in 2021 testing

Emergence	8.0
Standability	6.5
Plant Type	2.0
Plant Height	M+
Phytophthora Gene	Rps3a (8.0 tol)
Iron Deficiency Chlorosis	5.0
Brown Stem Rot	MR
Sclerotinia White Mold	5.5
Sudden Death Syndrome	7.5
Cyst Nematode Race	PI88788 (R3, MR14)

NOTES:

Plant Type: 2 Intermediate, 2.5 Intermediate-Bush Disease Rating: 9 Excellent, 1 Poor S=Susceptible R=Resistant

MERCHMAN SEEDS

SOYBEANS

Enlist E3 SOYBEANS

CHEYENNE 2220E BRAND

2.0 RM

EXCELLENT ADAPTATION FOR POORLY DRAINED SOILS

- Excellent Sudden Death Syndrome tolerance
- Works well in non-IDC soil types
- Yielded 103.3% in 2 years of testing

Emergence	8.0
Standability	7.0
Plant Type	2.0
Plant Height	M
Phytophthora Gene	Rps1k, (7.0 tol)
Iron Deficiency Chlorosis	5.0
Brown Stem Rot	R
Sclerotinia White Mold	6.0
Sudden Death Syndrome	9.0
Cyst Nematode Race	PI88788 (R3, MR14)

CHIPPEWA 2323E BRAND

2.3 RM

WIDELY ADAPTED BEAN WITH GREAT AGRONOMIC DEFENSE

- Great field tolerance to Phytophthora along with Rps1cH3a gene
- Above average SDS, SWM, IDC & Charcoal Rot
- Yielded 105.4% in 2021 testing

Emergence	7.5
Standability	7.0
Plant Type	2.5
Plant Height	M+
Phytophthora Gene	Rps1c, H3a, (7.0 tol)
Iron Deficiency Chlorosis	6.5
Brown Stem Rot	No Gene
Sclerotinia White Mold	6.0
Sudden Death Syndrome	6.5
Cyst Nematode Race	PI88788

OSAGE 2025E BRAND

2.5 RM

PEKING SOURCE FOR SOYBEAN CYST NEMATODE

- High yield with solid defense against high Soybean Cyst Nematode pressure
- Yields best on prairie soils
- Yielded 102.9% in 2 years of testing

Emergence	8.0
Standability	7.0
Plant Type	2.0
Plant Height	M+
Phytophthora Gene	Rps1k, (7.0 tol)
Iron Deficiency Chlorosis	5.5
Brown Stem Rot	No Gene
Sclerotinia White Mold	5.0
Sudden Death Syndrome	5.5
Cyst Nematode Race	Peking

NOTES:

Plant Type: 2 Intermediate, 2.5 Intermediate-Bush Disease Rating: 9 Excellent, 1 Poor S=Susceptible R=Resistant

MERCHMAN SEEDS

SOYBEANS

Enlist E3 SOYBEANS

CHICKASAW 2225E BRAND

2.5 RM

GREAT CHOICE FOR THE STRESSED ACRE

- Excellent stress tolerance
- Very good tolerances to Brown Stem Rot, Iron Chlorosis & Phytophthora Root Rot
- Reduce population on productive acres
- Yielded 100.5% in 2 years of testing

Emergence	8.0
Standability	6.5
Plant Type	2.5
Plant Height	M-T
Phytophthora Gene	No Gene, (7.0 tol)
Iron Deficiency Chlorosis	6.0
Brown Stem Rot	R
Sclerotinia White Mold	4.5
Sudden Death Syndrome	5.0
Cyst Nematode Race	PI88788

APACHE 1926E BRAND

2.6 RM

WORKS ANYWHERE AND TAKES STRESS WELL

- Great agronomic package for poorly drained soils
- Very high Brown Stem Rot tolerance
- Very high Stem Canker tolerance
- Yielded 102.2% in 2021 testing

Emergence	8.0
Standability	5.5
Plant Type	2.5
Plant Height	M-T
Phytophthora Gene	Rps1k (8.0 tol)
Iron Deficiency Chlorosis	5.0
Brown Stem Rot	R
Sclerotinia White Mold	5.0
Sudden Death Syndrome	6.0
Cyst Nematode Race	PI88788 (R3, MR14)

MOHAWK 2329E BRAND

2.9 RM

YIELD LEADER IN HIGH PERFORMING ACRES

- Rps1k gene for phytophthora tolerance
- Very good SDS tolerance
- Outstanding Charcoal Rot tolerance
- Yielded 102.9% in 2021 testing

Emergence	7.0
Standability	7.5
Plant Type	2.0
Plant Height	M+
Phytophthora Gene	Rps1k
Iron Deficiency Chlorosis	5.0
Brown Stem Rot	No Gene
Sclerotinia White Mold	5.0
Sudden Death Syndrome	6.5
Cyst Nematode Race	PI88788 (R3, MR14)

NOTES:

Plant Type: 2 Intermediate, 2.5 Intermediate-Bush Disease Rating: 9 Excellent, 1 Poor S=Susceptible R=Resistant

MERSCHMAN SEEDS

SOYBEANS

Enlist E3 SOYBEANS

ARTHUR 2330E BRAND

3.0 RM

WIDELY ADAPTED CONSISTENT YIELDER

- Great fit from Nebraska to Indiana
- Great field tolerance to Phytophthora along with Rps1k gene
- Very good stress tolerance for variable acres
- Yielded 102.6% in 2 years of testing

Emergence	7.5
Standability	7.0
Plant Type	2.5
Plant Height	M+
Phytophthora Gene	Rps1k, (7.5 tol)
Iron Deficiency Chlorosis	5.0
Brown Stem Rot	No Gene
Sclerotinia White Mold	3.0
Sudden Death Syndrome	5.5
Cyst Nematode Race	PI88788 (R3, MR14)

MCKINLEY 2132E BRAND

3.2 RM

FITS EAST TO WEST ON ALL SOIL TYPES

- Performs best in high-yielding environments
- Moves south as an early soybean
- Yielded 102.2% in 2 years of testing

Emergence	7.0
Standability	7.0
Plant Type	2.5
Plant Height	M-T
Phytophthora Gene	No Gene
Iron Deficiency Chlorosis	5.0
Brown Stem Rot	R
Shatter Score	7.0
Sudden Death Syndrome	6.0
Cyst Nematode Race	PI88788

JEFFERSON 2233E BRAND

3.3 RM

COMBINATION OF GREAT YIELD AND DEFENSE

- Great plant type & stature for consistent yields on variable acres
- Excellent stress tolerance
- Excellent field tolerance to Phytophthora
- Yielded 102.5% in 2 years of testing

Emergence	8.0
Standability	6.5
Plant Type	3.0
Plant Height	M-T
Phytophthora Gene	No Gene, (7.5 tol)
Iron Deficiency Chlorosis	5.0
Brown Stem Rot	MR
Frogeye	6.0
Sudden Death Syndrome	5.5
Cyst Nematode Race	PI88788

NOTES:

Plant Type: 2 Intermediate, 2.5 Intermediate-Bush Disease Rating: 9 Excellent, 1 Poor S=Susceptible R=Resistant

MERCHMAN SEEDS

SOYBEANS

Enlist E3 SOYBEANS

KENNEDY 1936E BRAND

3.6 RM

WIDELY ADAPTED PLUS GOES SOUTH WELL

- Proven high-yielding line
- Plant on all soil types
- Excellent field tolerance to Phytophthora
- Excellent tolerance to Stem Canker & Frogeye Leaf Spot
- Yielded 102.8% in 4 years of testing

Emergence	8.0
Standability	6.5
Plant Type	2.0
Plant Height	M+
Phytophthora Gene	No Gene, (7.0 tol)
Iron Deficiency Chlorosis	6.0
Brown Stem Rot	No Gene
Frogeye	7.0
Sudden Death Syndrome	6.0
Cyst Nematode Race	PI88788 (R3, MR14)

COOLIDGE 2336E BRAND

3.6 RM

PROVEN LINE THAT WORKS IN ALL YIELD ENVIRONMENTS

- Excellent stress tolerance for the variable acres
- Great field tolerance to Phytophthora along with Rps1k gene
- Very good Charcoal Rot tolerance
- Yielded 103.5% in 2 years of testing

Emergence	7.0
Standability	6.5
Plant Type	3.0
Plant Height	M-T
Phytophthora Gene	Rps1k, (7.0 tol)
Iron Deficiency Chlorosis	5.0
Brown Stem Rot	R
Frogeye	5.0
Sudden Death Syndrome	6.0
Cyst Nematode Race	PI88788

STS MONROE 2337E BRAND

3.7 RM

EXCELLENT YIELD POTENTIAL WITH GREAT AGRONOMICS

- Great fit for Iowa, Illinois & East
- Great field tolerance to Phytophthora along with Rps1k
- Great tolerance to Frogeye, SDS & BSR
- STS resistance
- Yielded 103.3% in 2021 testing

Emergence	7.0
Standability	7.5
Plant Type	2.0
Plant Height	M+
Phytophthora Gene	Rps1k, (6.5 tol)
Iron Deficiency Chlorosis	4.0
Brown Stem Rot	R
Frogeye	6.0
Sudden Death Syndrome	7.5
Cyst Nematode Race	PI88788

NOTES:

Plant Type: 2 Intermediate, 2.5 Intermediate-Bush Disease Rating: 9 Excellent, 1 Poor S=Susceptible R=Resistant

MERCHMAN SEEDS

SOYBEANS

Enlist E3 SOYBEANS

TRUMAN 2338E BRAND

3.8 RM

IMPRESSIVE YIELDER IN PRODUCTIVE SOILS

- Great fit for Iowa, Missouri, Illinois, Indiana & Ohio
- Great field tolerance to Phytophthora along with Rps1k gene
- Use Starting Line Plus in fields with SDS history
- Yielded 104.0% in 2021 testing

Emergence	8.0
Standability	8.0
Plant Type	2.0
Plant Height	M+
Phytophthora Gene	Rps1k, 3a (7.0 tol)
Iron Deficiency Chlorosis	4.5
Brown Stem Rot	No Gene
Stem Canker	R
Sudden Death Syndrome	5.0
Cyst Nematode Race	PI88788 (R3, MR14)

AUSTIN 2040E BRAND

4.0 RM

GREAT FOR MISSOURI, ILLINOIS, KANSAS AND KENTUCKY

- Great disease package with high yield potential
- Excellent Frogeye Leaf Spot tolerance
- Use Starting Line Plus in fields with SDS history
- Works well on all soil types
- Yielded 105.5% in 4 years of testing

Emergence	7.0
Standability	7.0
Plant Type	2.0
Plant Height	M-T
Phytophthora Gene	Rps3a
Frogeye	8.0
Brown Stem Rot	No Gene
Stem Canker	75%R
Sudden Death Syndrome	4.0 (below avg)
Cyst Nematode Race	PI88788 (R3, MR14)

STS DENVER 2042E BRAND

4.2 RM

PLANT ON LIGHTER SOIL TYPES

- Very good Frogeye Leaf Spot tolerance and Stem Cranker
- Handles heat and drought stress well
- Yielded 103.0% in 4 years of testing

Emergence	8.0
Standability	8.0
Plant Type	2.0
Plant Height	M
Phytophthora Gene	No Gene
Frogeye	6.0
Brown Stem Rot	No Gene
Stem Canker	R
Sudden Death Syndrome	6.0
Cyst Nematode Race	PI88788 (R3, MR14)

NOTES:

Plant Type: 2 Intermediate, 2.5 Intermediate-Bush Disease Rating: 9 Excellent, 1 Poor S=Susceptible R=Resistant

MERSCHMAN SEEDS

SOYBEANS

Enlist E3 SOYBEANS

NORFOLK 2243E BRAND

4.3 RM

OUTSTANDING YIELDER WITH GREAT DEFENSE

- Moves North & South well
- Good height & plant type for variable soils
- Great standability for productive acres
- Yielded 106.1% in 2 years of testing

Emergence	7.0
Standability	7.0
Plant Type	2.0
Plant Height	M+
Phytophthora Gene	No Gene, (6.0 tol)
Frogeye	8.0
Brown Stem Rot	No Gene
Stem Canker	R
Sudden Death Syndrome	7.0
Cyst Nematode Race	PI88788

STS ATLANTA 2045E BRAND

4.5 RM

STRONG FIT FOR THE DELTA AND MID-SOUTH

- Great standability for tall plant height
- Very high tolerance to metribuzin
- Excluder for salt
- Yielded 105.2% in 4 years of testing

Emergence	7.0
Standability	6.0
Plant Type	2.0
Plant Height	M-T
Phytophthora Gene	No Gene
Frogeye	6.5
Brown Stem Rot	NA
Stem Canker	R
Sudden Death Syndrome	4.0 (below avg)
Cyst Nematode Race	PI88788 (R3, MR14)

MEMPHIS 2346E BRAND

4.6 RM

VERSATILE SOYBEAN IN ALL ENVIRONEMNTS

- Performs great on heavy & light soils
- Very good field tolerance to Phytophthora
- Great Frogeye & Cercospora tolerance
- Excluder for salt
- Yielded 104.8% in 2021 testing

Emergence	NA
Standability	7.0
Plant Type	2.5
Plant Height	M-T
Phytophthora Gene	No Gene
Iron Deficiency Chlorosis	4.0
Brown Stem Rot	No Gene
Frogeye	7.0
Sudden Death Syndrome	NA
Cyst Nematode Race	PI88788 (R3, MR14)

NOTES:

Plant Type: 2 Intermediate, 2.5 Intermediate-Bush Disease Rating: 9 Excellent, 1 Poor S=Susceptible R=Resistant

MERSCHMAN SEEDS

SOYBEANS

Enlist E3 SOYBEANS

NASHVILLE 2147E BRAND

4.7 RM

ADAPTED TO ALL SOIL TYPES

- Top performer in high & low yield environments
- Excellent tolerance to Stem Canker
- Susceptible to Frogeye Leaf Spot
- Yielded 104.8% in 3 years of testing

Emergence	7.0
Standability	6.5
Plant Type	2.5
Plant Height	M-T
Phytophthora Gene	Rps1a
Brown Stem Rot	No Gene
Sudden Death Syndrome	3.0 (below avg)
Stem Canker	R
Cyst Nematode Race	PI88788

DALLAS 2348E BRAND

4.8 RM

VERY STRONG EAST TO WEST FIT THAT FAVORS PRODUCTIVE SOILS

- Great for Arkansas, Kentucky & Missouri
- Very good field tolerance to Phytophthora
- Great Frogeye & Cercospora tolerance
- Yielded 107.9% in 2021 testing

Emergence	7.5
Standability	7.5
Plant Type	3.0
Plant Height	M+
Phytophthora Gene	No Gene (6.0 tol)
Brown Stem Rot	No Gene
Frogeye	7.5
Sudden Death Syndrome	NA
Stem Canker	R
Cyst Nematode Race	PI88788 (R3, MR14)

CHARLESTON 2349E RK BRAND

4.9 RM

ROOT KNOT TOLERANCE PLUS YIELD

- Very good field tolerance to Phytophthora
- Excellent Frogeye & Cercospora tolerance
- Excellent stress tolerance
- Yielded 101.2% in 2021 testing

Emergence	7.5
Standability	7.5
Plant Type	2.5
Plant Height	M-T
Phytophthora Gene	No Gene (6.0 tol)
Frogeye	R (7.5 tol)
Brown Stem Rot	No Gene
Root Knot Nematode	R
Sudden Death Syndrome	6.0
Cyst Nematode Race	PI88788 (R3, MR14)

NOTES:

Plant Type: 2 Intermediate, 2.5 Intermediate-Bush Disease Rating: 9 Excellent, 1 Poor S=Susceptible R=Resistant

MERSCHMAN SEEDS

MIAMI 2349E BRAND

4.9 RM

RESPONDS TO HIGH YIELDING ENVIRONMENTS

- Great full season option for Mid-South
- Great standability for plant height
- Very good SDS, Frogeye, Phytophthora & Cercospora tolerance
- Yielded 108.5% in 2 years of testing

Emergence	8.5
Standability	7.5
Plant Type	2.0
Plant Height	M-T
Phytophthora Gene	No Gene, (6.0 tol)
Frogeye	6.5
Brown Stem Rot	R
Stem Canker	R
Sudden Death Syndrome	6.0
Cyst Nematode Race	50% PI88788 (R3, MR14), 50% Peking

NOTES:

MERSCHMAN SEEDS

SOYBEANS

CHARACTERISTIC CHART

Enlist E3 SOYBEANS

MERSCHMAN SEEDS® BRAND	Relative Maturity	Emergence	Standability	Iron Chlorosis Tolerance	Frogeye	Phytophthora Gene	Stress Tolerance	Brown Stem Rot Tolerance	Shatter Score	Plant Type	Plant Height	Pubescence Color	Hilum Color	Flower Color	Pod Color	Cyst Nematode Race Resistance	Sudden Death Syndrome Tolerance	Sclerotinia White Mold Tolerance	Stem Canker
SATURN 2312E	1.2	8.0	6.0	6.0	NA	No Gene (6.0 tol)	7.0	NG	6.5	2.0	M+	Gray	Imperfect Black	Purple	Brown	PI88788 (R3, MR14)	9.0	6.0	NA
MERCURY 2315E	1.5	8.0	7.0	5.0	NA	Rps3a (8.0 tol)	7.0	R	NA	2.0	M	Gray	Buff	Purple	Tan	PI88788 (R3, MR14)	7.5	6.0	NA
NEPTUNE 2317E	1.7	8.0	6.5	5.0	NA	Rps3a (8.0 tol)	8.0	MR	NA	2.0	M+	Gray	Buff	Purple	Tan	PI88788 (R3, MR14)	7.5	5.5	NA
CHEYENNE 2220E	2.0	8.0	7.0	5.0	NA	Rps1k (7.0 tol)	NA	R	6.0	2.0	M	Gray	Imperfect Black	Purple	Brown	PI88788 (R3, MR14)	9.0	6.0	NA
CHIPPEWA 2323E	2.3	7.5	7.0	6.5	NA	Rps1cH3a (7.0 tol)	7.5	NG	NA	2.5	M+	Gray	Buff	White	Tan	PI88788	6.5	6.0	NA
OSAGE 2025E	2.5	8.0	7.0	5.5	NA	Rps1k (7.0 tol)	7.5	NG	6.5	2.0	M+	Gray	Buff	Purple	Tan	Peking	5.5	5.0	NA
CHICKASAW 2225E	2.5	8.0	6.5	6.0	NA	No Gene (7.0 tol)	8.0	R	NA	2.5	M-T	Gray	Imperfect Black	Purple	Brown	PI88788	5.0	4.5	NA
APACHE 1926E	2.6	8.0	5.5	5.0	NA	Rps1k (8.0 tol)	8.0	R	6.5	2.5	M-T	Gray	Buff	White	Tan	PI88788 (R3, MR14)	6.0	5.0	NA
MOHAWK 2329E	2.9	7.0	7.5	5.0	NA	Rps1k	NA	NG	6.5	2.0	M+	Gray	Imperfect Black	Purple	Brown	PI88788 (R3, MR14)	6.5	5.0	NA
ARTHUR 2330E	3.0	7.5	7.0	5.0	NA	Rps1k (7.5 tol)	7.0	NG	6.0	2.5	M+	Gray	Imperfect Black	Purple	Brown	PI88788 (R3, MR14)	5.5	3.0	NA
MCKINLEY 2132E	3.2	7.0	7.0	5.0	NA	No Gene	NA	R	7.0	2.5	M-T	Gray	Imperfect Black	Purple	Tan	PI88788	6.0	5.0	NA
JEFFERSON 2233E	3.3	8.0	6.5	5.0	6.0	No Gene (7.5 tol)	8.0	MR	7.0	3.0	M-T	Light Tawny	Brown	Purple	Brown	PI88788	5.5	NA	NA

Ratings:
Plant Type
1.0 = Thin (little or no side branching)
1.5 = Thin-Intermediate (occasional side branching)
2.0 = Intermediate (moderate side branching)
2.5 = Intermediate-Bush (substantial side branching)
3.0 = Bush (profuse side branching)

Plant Height—Short, Medium-Short, Medium, Medium+, Medium-Tall and Tall

Disease Rating Scale = 9 to 1, where 9 = Excellent 1 = Poorest
This applies to tolerance or disease ratings, Frogeye Leaf Spot, Iron Chlorosis, Brown Stem Rot, Charcoal Rot, Sclerotinia White Mold, Sudden Death Syndrome, Stem Canker, Cercospora Leaf Spot & Blight, Root Knot Nematode, etc. Phytophthora Root Rot—PRR genes are listed along with tolerance scores.

S = Susceptible R = Resistant NA = Not Available NG = No Gene

Merschman Seeds® recommends that our soybeans be planted at 120,000 to 132,250 seeds per acre in wide rows and 143,750 to 162,000 in narrow rows. Increase your seeding rate if necessary based on local conditions.

merseeds@merschmanseeds.com ▪ merschmanseeds.com ▪ 319-837-6111

MERSCHMAN SEEDS

SOYBEANS

CHARACTERISTIC CHART

Enlist E3 SOYBEANS

MERSCHMAN SEEDS® BRAND	Relative Maturity	Emergence	Standability	Iron Chlorosis Tolerance	Frogeye	Phytophthora Gene	Stress Tolerance	Brown Stem Rot Tolerance	Shatter Score	Plant Type	Plant Height	Pubescence Color	Hilum Color	Flower Color	Pod Color	Cyst Nematode Race Resistance	Sudden Death Syndrome Tolerance	Sclerotinia White Mold Tolerance	Stem Canker
KENNEDY 1936E	3.6	8.0	6.5	6.0	7.0	No Gene (7.0 tol)	8.0	NG	6.5	2.0	M+	Gray	Imperfect Black	Purple	Brown	PI88788 (R3, MR14)	6.0	NA	NA
COOLIDGE 2336E	3.6	7.0	6.5	5.0	5.0	Rps1k (7.0 tol)	8.0	R	7.0	3.0	M-T	Gray	Imperfect Black	Purple	Tan	PI88788	6.0	NA	NA
MONROE 2337E STS	3.7	7.0	7.5	4.0	6.0	Rps1k (6.5 tol)	6.5	R	NA	2.0	M+	Light Tawny	Black	Purple	Brown	PI88788	7.5	NA	NA
TRUMAN 2338E	3.8	8.0	8.0	4.5	NA	Rps1k, 3a (7.0 tol)	6.5	NG	6.0	2.0	M+	Light Tawny	Brown	White	Tan	PI88788 (R3, MR14)	5.0	NA	R
AUSTIN 2040E	4.0	7.0	7.0	8.0	8.0	Rps3a	7.0	NG	6.0	2.0	M-T	Light Tawny	Brown	Purple	Tan	PI88788 (R3, MR14)	4.0 (below avg)	NA	75%R
DENVER 2042E STS	4.2	8.0	8.0	NA	6.0	No Gene	NA	NG	NA	2.0	M	Gray	Buff	White	Brown	PI88788 (R3, MR14)	6.0	NA	R
NORFOLK 2243E	4.3	7.0	7.0	NA	8.0	No Gene (6.0 tol)	NA	NG	6.5	2.0	M+	Light Tawny	Brown	White	Brown	PI88788	7.0	NA	R
ATLANTA 2045E STS	4.5	7.0	6.0	NA	6.5	No Gene	NA	NA	6.0	2.0	M-T	Gray	Imperfect Black	Purple	Brown	PI88788 (R3, MR14)	4.0 (below avg)	NA	R
MEMPHIS 2346E	4.6	NA	7.0	4.0	7.0	No Gene	NA	NG	4.5	2.5	M-T	Gray	Buff	White	Brown	PI88788 (R3, MR14)	NA	4.0	NA
NASHVILLE 2147E	4.7	7.0	6.5	NA	NA	Rps1a	NA	NG	6.0	2.5	M-T	Gray	Imperfect Black	Purple 93% White 7%	Brown	PI88788	3.0 (below avg)	NA	R
DALLAS 2348E	4.8	7.5	7.5	NA	7.5	No Gene (6.0 tol)	NA	NG	NA	3.0	M+	Gray	Buff	White	Brown	PI88788 (R3, MR14)	NA	NA	R
CHARLESTON 2349E RK	4.9	7.5	7.5	NA	R (7.5 tol)	No Gene (6.0 tol)	NA	NG	7.0	2.5	M-T	Light Tawny	Brown	White	Tan	PI88788 (R3, MR14)	6.0	NA	R
MIAMI 2349E	4.9	8.5	7.5	NA	6.5	No Gene (6.0 tol)	NA	R	6.0	2.0	M-T	Light Tawny	Black	Purple	Brown	50% PI88788 (R3, MR14) 50% Peking	6.0	NA	R

Ratings:
Plant Type
1.0 = Thin (little or no side branching)
1.5 = Thin-Intermediate (occasional side branching)
2.0 = Intermediate (moderate side branching)
2.5 = Intermediate-Bush (substantial side branching)
3.0 = Bush (profuse side branching)

Plant Height—Short, Medium-Short, Medium, Medium+, Medium-Tall and Tall

Disease Rating Scale = 9 to 1, where 9 = Excellent 1 = Poorest
This applies to tolerance or disease ratings, Frogeye Leaf Spot, Iron Chlorosis, Brown Stem Rot, Charcoal Rot, Sclerotinia White Mold, Sudden Death Syndrome, Stem Canker, Cercospora Leaf Spot & Blight, Root Knot Nematode, etc. Phytophthora Root Rot—PRR genes are listed along with tolerance scores.

S = Susceptible R = Resistant NA = Not Available NG = No Gene

Merschman Seeds® recommends that our soybeans be planted at 120,000 to 132,250 seeds per acre in wide rows and 143,750 to 162,000 in narrow rows. Increase your seeding rate if necessary based on local conditions.

merseeds@merschmanseeds.com ▪ merschmanseeds.com ▪ 319-837-6111

FROM THE FIELD TO THE BAG

QUALITY COUNTS

As another layer of quality control in the seed production process, we deploy our own Seed Inspectors to periodically check the production soybean fields to confirm the purity of the soybean plant characteristics as well as field cleanliness.

Our seed is also sent to the Iowa State University Seed Lab multiple times throughout this process to be tested to confirm the quality of the seed before it is conditioned and bagged. The color sorters in our seed plants then work to more accurately detect and efficiently remove defects and foreign material based on the color profile of our seed, improving the overall quality of the seed.

The next level of quality is keeping our word with the customer. We implemented a state of the art inventory tracking system to ensure the customer receives their exact order that was placed. This means we do not over-sell products beyond our inventory and we do not substitute products at the last minute. You receive what you order.


CONVENTIONALS
Industry Leading Non-Traited Germplasm

CONVENTIONAL SOYBEANS

SIOUX 2228 BRAND

2.8 RM

YIELD LEADER THAT FITS ON ALL SOIL TYPES

- Very good tolerance to Phytophthora with Rps1c gene
- Excellent tolerance to Charcoal Rot
- Very good tolerance to SDS
- Yielded 103.6% in 2021 testing

Emergence	8.0
Standability	7.5
Plant Type	NA
Plant Height	M+
Phytophthora Gene	Rps1c
Brown Stem Rot	No Gene
Sudden Death Syndrome	6.0
Charcoal Rot	8.0
Cyst Nematode Race	PI88788 (R3, MR14)

GRANT 2236 STS BRAND

3.6 RM

WIDELY ADAPTED STS LINE

- Great fit for Iowa, Illinois, Indiana & productive Missouri soil types
- Great tolerance to Phytophthora with Rps1k gene
- Starting Line Plus™ recommended in fields with SDS history
- Yielded 101.4% in 2021 testing

Emergence	7.0
Standability	7.0
Plant Type	NA
Plant Height	M
Phytophthora Gene	Rps1k
Brown Stem Rot	No Gene
Sudden Death Syndrome	5.5
Metribuzin	3.7
Stem Canker	R
Cyst Nematode Race	PI88788 (R3, MR14)

BOSTON 2340 BRAND

4.0 RM

PROVEN YIELDER THAT MOVES SOUTH WELL

- Proven yielder that moves south well
- Great tolerance to Phytophthora with Rps1k gene
- Very good SDS tolerance
- Yielded 101.3% in 2 years of testing

Emergence	8.0
Standability	7.0
Plant Type	2.5
Plant Height	M+
Phytophthora Gene	Rps1k
Brown Stem Rot	No Gene
Iron Chlorosis	5.0
Stem Canker	R
Sudden Death Syndrome	6.0
Cyst Nematode Race	PI88788 (R3, MR14)

NOTES:

Plant Type: 2 Intermediate, 2.5 Intermediate-Bush Disease Rating: 9 Excellent, 1 Poor S=Susceptible R=Resistant

CONVENTIONAL SOYBEANS CHARACTERISTIC CHART

MERSCHMAN SEEDS® BRAND	Relative Maturity	Emergence	Standability	Iron Chlorosis Tolerance	Phytophthora Gene	Stress Tolerance	Brown Stem Rot Tolerance	Shatter Score	Plant Type	Plant Height	Pubescence Color	Hilum Color	Flower Color	Pod Color	Cyst Nematode Race Resistance	Sudden Death Syndrome Tolerance
SIOUX 2228	2.8	8.0	7.5	5.0	Rps1c	NA	NG	NA	NA	M+	Light Tawny	Black	Purple	Brown	PI88788 (R3, MR14)	6.0
GRANT 2236 STS	3.6	7.0	7.0	7.0	Rps1k	NA	NG	NA	NA	M	Light Tawny	Black	White	Brown	PI88788 (R3, MR14)	5.5
BOSTON 2340	4.0	8.0	7.0	5.0	Rps1k	NA	NG	6.0	2.5	M+	Light Tawny	Black	Purple	Tan	PI88788 (R3, MR14)	6.0

S = Susceptible R = Resistant NA = Not Available NG = No Gene

Merschman Seeds recommends that our soybeans be planted at 120,000 to 132,250 seeds per acre in wide rows and 143,750 to 162,000 in narrow rows. Increase your seeding rate if necessary based on local conditions.

Plant Height—Short, Medium-Short, Medium, Medium+, Medium-Tall and Tall

Disease Rating Scale = 9 to 1, where 9 = Excellent 1 = Poorest
This applies to tolerancev or disease ratings, Frogeye Leaf Spot, Iron Chlorosis, Brown Stem Rot, Charcoal Rot, Sclerotinia White Mold, Sudden Death Syndrome, Stem Canker, Cercospora Leaf Spot & Blight, Root Knot Nematode, etc. Phytophthora Root Rot—PRR genes are listed along with tolerance scores.

Ratings:
Plant Type
1.0 = Thin (little or no side branching)
1.5 = Thin-Intermediate (occasional side branching)
2.0 = Intermediate (moderate side branching)
2.5 = Intermediate-Bush (substantial side branching)
3.0 = Bush (profuse side branching)

merseeds@merschmanseeds.com ▪ merschmanseeds.com ▪ 319-837-6111

MERSCHMAN SEEDS®
WHEAT
SOFT RED WINTER WHEAT

Merschman Seeds® focuses on early wheat lines that are second to none agronomically and fit the double crop market perfectly.

SL STARTING LINE™

See how Merschman Seeds' most innovative seed treatment yet can set your wheat up for the most successful year.

SEED FINISHER

POLYMERS
Helps improve the plantability of the seed, enhances appearance and controls dust

COLORANT

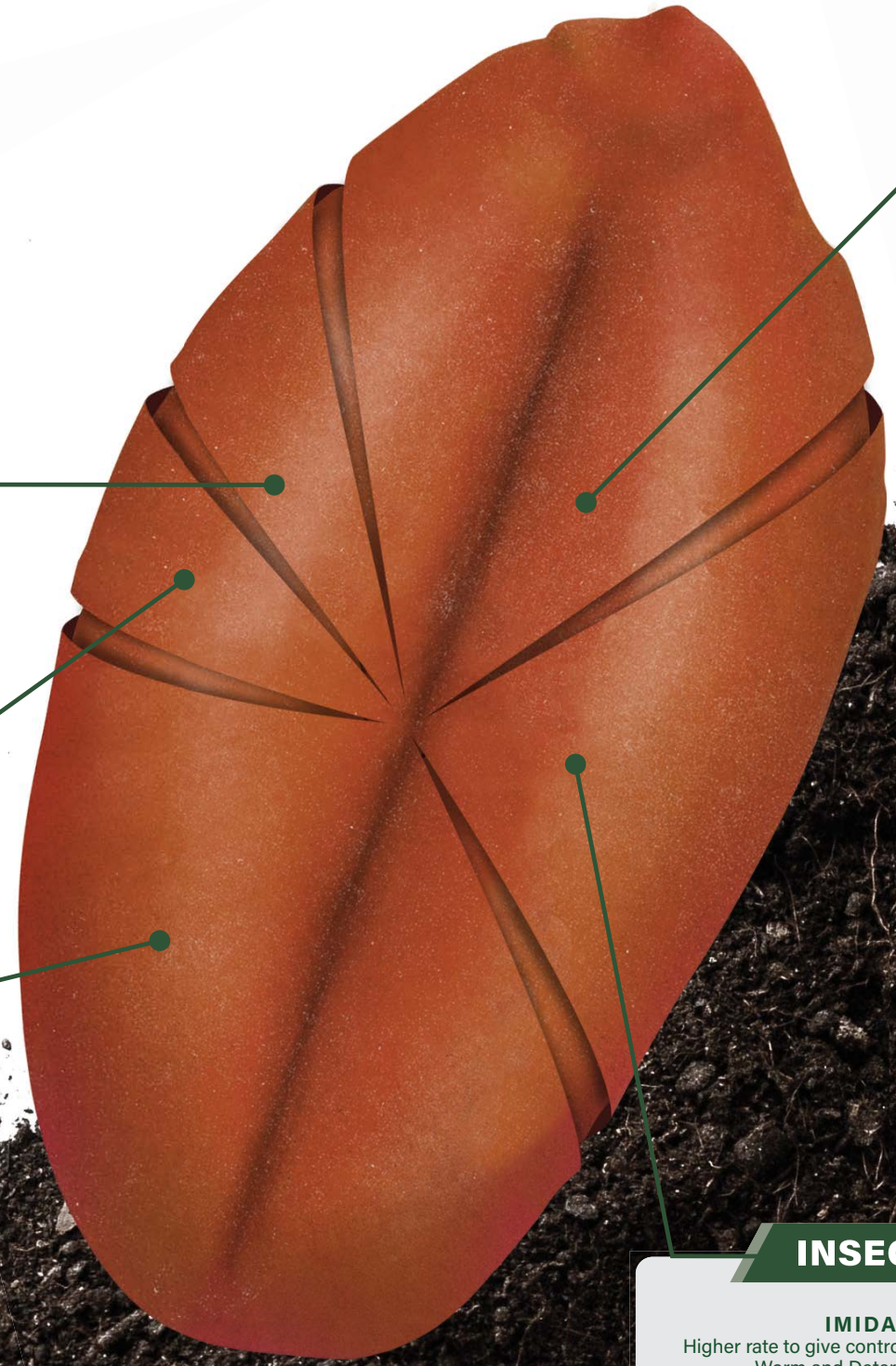
Red color indicates seeds are treated.

3 FUNGICIDES

IPCONAZOLE
Protects against Common Root Rot, Common Bunt, Seed Borne Fusarium, Stinking Smut & Rhizoctonia

THIABENDAZOLE
Seedborne Fusarium fungi control

METALAXYL
Systemically protects seed and seedling from Pythium



3 BIOSTIMULANTS

TRIPIDITY ST

HORMONES • AMINO ACIDS • NUTRIENTS

Biostimulants increase yield by allowing the crop to perform at an optimal level, even under stress

5 ESSENTIAL NUTRIENTS

P_2O_5, Mn, B, Fe, Zn
Boost germination and early growth

BLEND OF PLANT EXTRACTS

Amino Acids, glucose and vitamins induce enzyme activity, enhance germination & early growth.

Tripidity ST allows each seed to recieve the same emergence message and complete cellular food source at the same time.

+4.4 bu/A
Average Yield Advantage

BALANCED RATIO OF HORMONES

INDOLE-3-BUTRYIC ACID (IBA)
IBA is an auxin that enhances root growth; involved in apical dominance, stimulates cell elongation, enhances fruit and seed development.

CYTOKININ (KINETIN)
Stimulates cell division, involved in shoot growth, delays leaf senescence and activates dormant buds.

GIBBERELLIC ACID (GA)
Stimulates seed germination, shoot elongation, flowering, and regulates production of hydrolytic enzymes in grains.

INSECTICIDE

IMIDACLOPRID
Higher rate to give control of Aphids, Hessian Fly, Wire Worm and Deter Grasshopper Larvae

MERSCHMAN SEEDS

MERSCHMAN SEEDS

SOFT RED WINTER WHEAT

KATIE 15 BRAND

ULTRA EARLY

ULTRA-EARLY LINE THAT RESPONDS TO INCREASED MANAGEMENT

- One of the highest yielding ultra-early lines on the market
- Excellent test weight with natural tolerance to Head Scab & responds well to fungicide if Strip Rust is present
- 1.4 bu advantage compared to Millie 7 Brand

Head Type	SA
Standability	7.0
Winter Hardiness	7.0
Stripe Rust	3.0
Powdery Mildew	7.0
Septoria Leaf Blotch	8.0
Head Scab	7.0
Soil-Borne Mosaic Virus	3.0
Barley Yellow Dwarf Virus	NA

BINTEE 12 BRAND

ULTRA EARLY

ULTRA-EARLY LINE THAT YIELDS WITH MID-EARLY COMPETITORS

- Excellent double crop opportunity
- Excellent Test Weight
- Excellent Strip Rust tolerance
- 100.0% in 2021 tesing of Mid-Early lines

Head Type	SA
Standability	8.0
Winter Hardiness	7.0
Stripe Rust	9.0
Powdery Mildew	N/A
Septoria Leaf Blotch	8.5
Head Scab	8.5
Soil-Borne Mosaic Virus	N/A
Barley Yellow Dwarf Virus	N/A

JULIE 11 BRAND

MED-MED EARLY

YIELD LEADER THAT RESPONDS TO INCREASED MANAGEMENT

- Excellent test weight
- Great fit for Mid-South & Midwest
- Fhb1 gene tolerance for Head Scab
- 110.0% in 2021 testing in lower Midwest

Head Type	BA
Standability	8.0
Winter Hardiness	7.0
Stripe Rust	8.0
Powdery Mildew	7.5
Septoria Leaf Blotch	7.0
Head Scab Fhb1 Gene	7.5 tol.
Soil-Borne Mosaic Virus	7.0
Barley Yellow Dwarf Virus	6.5

NOTES:

SOFT RED WINTER WHEAT

MADDIE 3 BRAND

MED EARLY

HIGH YIELDING BULLETPROOF AGRONOMUC PACKAGE

- Excellent leaf disease tolerances
- Broadly adapted for all soil types
- Fhb1 gene for Head Scab tolerance
- 3.1 bu advantage compared to Barbie 14

Head Type	BA
Standability	7.0
Winter Hardiness	9.0
Stripe Rust	8.0
Powdery Mildew	8.0
Septoria Leaf Blotch	7.0
Head Scab Fhb1 Gene	7.5 tol.
Soil-Borne Mosaic Virus	8.0
Barley Yellow Dwarf Virus	8.0

BARBIE 15 BRAND

MEDIUM

SUPERIOR YIELDING LINE WITH EXCELLENT DISEASE PACKAGE

- Excellent agronomics across the board
- Excellent Strip Rust tolerance
- Works well from Wisconsin to Tennessee
- 103.0% in 2021 testing

Head Type	SA
Standability	8.0
Winter Hardiness	8.0
Stripe Rust	9.0
Powdery Mildew	9.0
Septoria Leaf Blotch	8.5
Head Scab Fhb1 Gene	8.5 tol.
Soil-Borne Mosaic Virus	N/A
Barley Yellow Dwarf Virus	N/A

NOTES:

> "What our family admires most about Merschman Seeds is the friendly and helpful staff as well as the awesome yield of Merschman Seeds."
>
> - Nora O.

> "The Ultra-Early variety kind of sparked my interest to be able to harvest by the end of June to get back into the wheat-soybean double cropping."
>
> - Nolan W.

> "I've been using Merschman Seeds products for 28 years. My entire farming career. They have always went above and beyond what was necessary and accepted as normal. Love doing business with an honest family owned company."
>
> -Steve S.

> "We have always had really good yielding Merschman wheat. Our lighter soils have a higher ROI to double crop wheat and soybeans than if we tried to raise corn."
>
> -Craig P.

MERSCHMAN SEEDS

SOFT RED WINTER WHEAT

MERSCHMAN SEEDS® WHEAT	KATIE 15 BRAND	BINTEE 12 BRAND	JULIE 11 BRAND	MADDIE 3 BRAND	BARBIE 15 BRAND
Maturity	UE	UE	M-ME	ME	M
Head Type	SA	SA	BA	BA	SA
Standability	7.0	8.0	8.0	7.0	8.0
Winter Hardiness	7.0	7.0	7.0	9.0	8.0
Stripe Rust	3.0	9.0	8.0	8.0	9.0
Powdery Mildew	7.0	N/A	7.5	8.0	9.0
Septoria Leaf Blotch	8.0	8.5	7.0	7.0	8.5
Head Scab	7.0	8.5	7.5 Fhb1 Gene	7.5 Fhb1 Gene	8.5 Fhb1 Gene
Soil-Borne Mosaic Virus	3.0	N/A	7.0	8.0	N/A
Barley Yellow Dwarf Virus	N/A	N/A	6.5	8.0	N/A

CHARACTERISTIC CHART KEY

Ratings: 9 = Best, 1 = Poorest

Maturity: UE = Ultra-Early, ME = Mid-Early, M= Medium

Head Type: SA = Smooth/Awnless, BA = Bearded/Awned

NA: Not Available

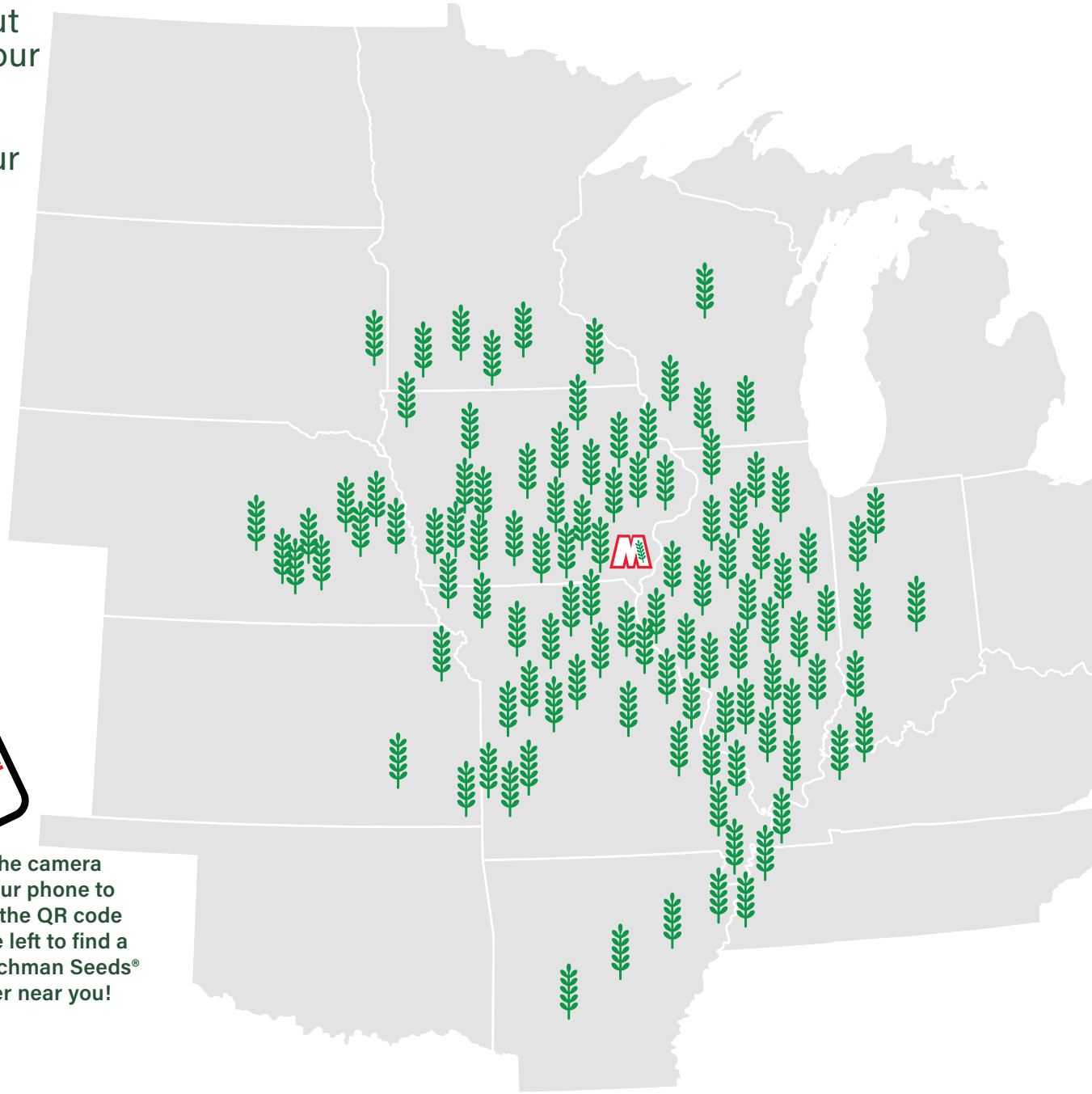
A TRUSTED NETWORK OF DEALERS

Finding a Merschman Seeds® Dealer is easy. They're located throughout the Midwest and Mid-South and our Find a Dealer tool on our website makes it easy to select the right Dealer for your farm. Discover your next friend in the field.

DISCOVER YOUR NEXT FRIEND IN THE FIELD!

SCAN NOW!

Use the camera on your phone to scan the QR code to the left to find a Merschman Seeds® Dealer near you!




AMERICA'S
ALFALFA®

MERSCHMAN SEEDS

ALFALFA

AMERICA'S ALFALFA

SOIL SELECTION

- Choose a field with good drainage
- Test the soil for pH and fertility
- Soils should have a pH of 6.5 or above
- If soil pH is below 6.5, an application of lime may be required 12 months ahead of seeding to raise soil pH

SOIL TEST

- Soil test for phosphorus (P), potassium (K) and other elements like sulfur
- Your local soil testing lab can make best recommendations for fertility
- P and K can be applied anytime prior to and/or at seeding
- Soil and plant tissue tests can also guide ongoing topdressing ratios throughout the life of the stand

SEEDING

- With proper management, alfalfa can be seeded conventionally, into reduced tillage or into no-till
- Seed a minimum of 15 pounds per acre
- Spring seedings can begin as soon as frost is out of the ground, seeding early will help improve first year yields
- Fall seedings should occur at least 6 weeks before the historic freeze date for performance the following year

SEEDING DEPTH

- Start with a firm seed bed
- Seed to soil contact and proper seeding depth makes the difference in stand performance
- Plant 1/4 to 1/2 inch deep in heavier soils
- Plant 1/2 to 3/4 inch deep in sandy soils

HARVEST

- Cut first year spring seeded stands at early to mid-bloom (about 70-80 days after seedings)
- Subsequent harvests can be made 25 to 28 days later
- Established stands (second year or older) can be harvested more frequently without severe stand damage
- Most growers like to start first harvest on established stand with a bud cut and following harvests at early bloom (about 26-30 days in most areas)
- Traffic Tested® varieties have been proven to with stand more frequent harvests

Americas Alfalfa	Fall Dormancy	Number of Cuttings	Traffic Tested	Salt Tolerance	Leaf Hopper	Phytophthora Root Rot	Aphanomyces Root Rot: Race 1	Aphanomyces Root Rot: Race 2	Aphanomyces Root Rot: Race 3	Aphanomyces Root Rot: Multi-Race	Anthracnose	Anthracnose Race1	Anthracnose Race 5	Verticilium Wilt	Bacterical Wilt	Fusarium Wilt	Pea Aphid	Spotted Alfalfa Aphid	Stem Nematode
AMERISTAND 419LH	4.0	3-4	-	-	HR	HR	HR	R	-	-	HR	-	-	HR	HR	HR	HR	HR	R
AMERISTAND 481HVXRR	4.0	3-4	-	-	-	HR	HR	HR	R	-	-	HR	R	HR	HR	HR	R	-	R
AMERISTAND 457TQ RR	4.2	4-5	EX	GER	-	HR	HR	HR	-	-	HR	-	-	HR	HR	HR	HR	R	R
AMERISTAND 428TQ	4.4	4-5	EX	GER	-	HR	HR	HR	-	HR	-	HR	HR	HR	HR	HR	R	R	HR
AMERISTAND 420LH RR	3.9	3-4	-	-	HR	HR	HR	R	-	-	HR	-	-	HR	HR	HR	R	R	R
FREEDOMSTAR RR	4.0	3-5	TOL	-	-	HR	R	-	-	-	-	R	-	HR	HR	HR	-	-	-
SS120	4.0	3	-	-	-	HR	R	-	-	-	-	HR	-	HR	HR	HR	-	-	-

HR = >51% Resistance, R = 31-51% Resistance, MR = 15-30% Resistance, LR = 6-14% Resistance, G = Germination, NA = Not Applicable

MERSCHMAN SEEDS

ALFALFA

AMERICA'S ALFALFA

AMERISTAND 481HVXRR

HARVXTRA with Roundup Ready Technology

HARVXTRA® WITH ROUNDUP READY® TECHNOLOGY WAS DEVELOPED TO MAXIMIZE QUALITY

- Latest advancement in disease resistance, which includes High Resistance to Aphanomyces Root Rot Race 1, 2 and 3*; and includes multi-race resistance to Anthracnose**
- HarvXtra® Alfalfa offers more flexibility in cutting schedule to achieve improved forage quality or greater yield potential
- Expect fast recovery for frequent harvest schedules under intensive management

Fall Dormancy	4.0
Winterhardiness	1.9
Cuttings/Season	3-4
Yield Potential	Excellent
Forage Quality Potential	Excellent
Stand Persistence	Excellent
Recovery Rate	Fast
Salt Tolerance	NA

AMERISTAND 420LH RR

ROUNDUP READY® ALFALFA WITH HIGH RESISTANCE TO POTATO LEAFHOPPER

- High potato leafhopper resistance that delivers high yield potential and forage quality, even under heavy leafhopper pressure
- High establishment success with glyphosate application shortly after emergence
- Winterhardy (WH=2.2); delivers good winter survival, even under harsh winter conditions
- DRI of 34/35 for good yield potential and stand persistance across a wide range of soil types and climates

Fall Dormancy	3.9
Winterhardiness	2.2
Cuttings/Season	3-4
Yield Potential	Excellent
Forage Quality Potential	Very Good
Stand Persistence	Excellent
Recovery Rate	Very Fast
Salt Tolerance	NA

AMERISTAND 457TQ RR

TRAFFIC TESTED™

Roundup Ready® ALFALFA

HIGH QUALITY TRAFFIC TESTED® ALFALFA WITH ROUNDUP READY® TOLERANCE

- Excellent forage quality for optimal animal performance
- Perfect disease resistance score 35/35 DRI with HR for both races 1 and 2 of Aphanomyces
- Very fast recovery for frequent harvest schedules under intensive management

Fall Dormancy	4.2
Winterhardiness	1.8
Cuttings/Season	4-5
Traffic Tested	Excellent
Yield Potential	Excellent
Forage Quality Potential	Excellent
Stand Persistence	Excellent
Recovery Rate	Very Fast
Salt Tolerance	Germination

NOTES:

1* Includes race 1 and race 2 protection. In addition, Forage Genetics International, LLC (FGI) has identified a novel source of Aphanomyces resistance in the greenhouse and field that visibly outperforms unrelated varieties on the market when grown under natural or artificial disease pressure. FGI researchers have been working cooperatively with universities collecting and testing the most virulent strains of Aphanomyces to help determine the level of resistance to this novel source. & 2* Includes race 1 protection, along with Anthracnose Race 5, which was recently confirmed by USDA's Agricultural Research Service. In tests established by the NAAIC Review Board, this variety demonstrated improved salt tolerance of germinating seeds (Ger) as compared to the industry salt tolerant checks in each category. References available upon request.

MERSCHMAN SEEDS

ALFALFA

AMERICA'S ALFALFA

AMERISTAND 428TQ

TRAFFIC TESTED

NEW DISEASE PACKAGE UPS ANTE ON YIELD AND PERSISTENCE LEADER

Outstanding yield potential & agronomic performance under 4 to 5-cut harvest management systems (FD=4.4)

DRI of 40/40 also includes HR to aphanomyces race 1, race 2, enhanced multi-race[1], & anthracnose race 1, race 5[2]

Superb WH (1.3); delivers excellent cold tolerance & persistance

Great standability for intensive management systems

Fall Dormancy	4.4
Winterhardiness	1.3
Cuttings/Season	4-5
Traffic Tested	Excellent
Yield Potential	Excellent
Forage Quality Potential	Excellent
Stand Persistence	Excellent
Recovery Rate	Very Fast
Salt Tolerance	Germination

AMERISTAND 419LH

HIGH RESISTANCE TO POTATO LEAFHOPPER WITH INCREASED YIELD AND FORAGE QUALITY POTENTIAL

- Selected for enhanced glandular hair trait expression with excellent winterhardiness
- High resistance to six common alfalfa diseases plus leafhopper & aphids
- Multi-foliate (ML) for increased forage quality
- Fast recovery after cutting with very good forage yield potential

Fall Dormancy	4.0
Winterhardiness	2.0
Cuttings/Season	3-4
Yield Potential	Excellent
Forage Quality Potential	Very Good
Stand Persistence	Excellent
Recovery Rate	Fast
Salt Tolerance	NA

FREEDOMSTAR RR

TRAFFIC TESTED

Roundup Ready ALFALFA

EXCEPTIONAL QUALITY FOR AN EXCEPTIONAL VALUE

- An economical Roundup Ready alfalfa blended for dependable forage yield potential & good quality
- Good winterharidness & pest package with resistance to key diseases
- Moderate to fast recovery after cutting for optimum yield potential
- NO RETURNS

Fall Dormancy	4.0
Winterhardiness	2.0
Cuttings/Season	3-5
Traffic Tested	Tolerant
Yield Potential	Very Good
Forage Quality Potential	Very Good
Stand Persistence	Excellent
Recovery Rate	Medium-Fast
Salt Tolerance	NA

SS120

EXCEPTIONAL QUALITY FOR AN EXCEPTIONAL VALUE

- An economical alfalfa blended for dependable forage yields and good quality
- Good winterharidness & pest package with strong resistance to key diseases
- Moderate to fast recovery after cutting for optimum yields in 3-cut system
- NO RETURNS, NO REPLANT

Fall Dormancy	4.0
Winterhardiness	2.5
Cuttings/Season	3-5
Traffic Tested	NA
Yield Potential	Very Good
Forage Quality Potential	Very Good
Average Stand Life	Medium
Recovery Rate	Moderate
Salt Tolerance	NA

NOTES:

1* Includes race 1 and race 2 protection. In addition, Forage Genetics International, LLC (FGI) has identified a novel source of Aphanomyces resistance in the greenhouse and field that visibly outperforms unrelated varieties on the market when grown under natural or artificial disease pressure. FGI researchers have been working cooperatively with universities collecting and testing the most virulent strains of Aphanomyces to help determine the level of resistance to this novel source. & 2* Includes race 1 protection, along with Anthracnose Race 5, which was recently confirmed by USDA's Agricultural Research Service. In tests established by the NAAIC Review Board, this variety demonstrated improved salt tolerance of germinating seeds (Ger) as compared to the industry salt tolerant checks in each category. References available upon request.

Product Use Statement: Enlist E3® soybeans contain the Enlist E3 trait that provides crop safety for use of labeled over-the-top applications of glyphosate, glufosinate and 2,4-D herbicides featuring Colex-D® technology when applied according to label directions. Following burndown, the only 2,4-D containing herbicide products that may be used with Enlist™ crops are products that feature Colex-D technology and are expressly labeled for use on enlist crops. 2,4-D products that do not contain Colex-D technology are not authorized for use in conjunction with Enlist E3 soybeans.

Warning: Enlist E3 soybeans are tolerant of over-the top applications of glyphosate, glufosinate and 2,4-D. Accidental application of incompatible herbicides to this variety could result in total crop loss. When using 2,4-D herbicides, grower agrees to only use 2,4-D products that contain Colex-D technology authorized for use in conjunction with Enlist E3 soybeans. Always read and follow herbicide label directions prior to use.

YOU MUST SIGN A TECHNOLOGY AGREEMENT, READ THE PRODUCT USE GUIDE PRIOR TO PLANTING AND FOLLOW HERBICIDE RESISTANCE MANAGEMENT (HRM) REQUIREMENTS.

The transgenic event in the Enlist E3® soybean is protected under Corteva Agriscience and M.S. Technologies, L.L.C. Patent Rights which can be found at: www.corteva.us/Resources/trait-stewardship.html.

The transgenic event in the Enlist E3® soybean event in Enlist E3® soybeans is jointly developed and owned by Dow AgroSciences LLC and M.S. Technologies, L.L.C. ®™ Enlist, Enlist E3, the Enlist E3 log and Colex-D are trademarks of Dow AgroSciences LLC.

SEED USE RESTRICTION AGREEMENT

This Seed Use Restriction Agreement (the "Agreement") applies to all users ("User(s)") of the seed ("Seed") contained in this package. If you purchase the Seed, you agree that you and any person or entity, including employees, representatives, contractors and agents thereof, who plant, grow, cultivate or otherwise use the Seed, will abide by these use restrictions. If you open or cause any person or entity to open a package of Seed, you agree that you accept the terms of this Agreement and you, your employees, representatives, contractors and agents will abide by these use restrictions.

SEED USE AGREEMENT

M.S. Technologies, L.L.C. ("MS TECH") and its suppliers are engaged in the business of developing and supplying for sale various varieties and/or hybrids of Seed. MS TECH and its suppliers have a substantial investment and expended substantial effort in the development and production of this seed and in the use of subsequent production of Seed. MS TECH and its suppliers have existing contractual relationships with other distributors for the sale of seed and expectations of additional contracts for sale of seed from such distributors in the future. The purchase of the Seed includes a limited license to produce a single crop under MS TECH property rights, including where applicable certain U.S. patents which can be found on the package and seed tags.

In consideration of the foregoing and in consideration of the Seed that User has been sold or otherwise granted the right to use, User hereby acknowledges and agrees that the production from the Seed will be used only for feed or processing and unless USER has an agreement for such purposes, Seed and plants produced from Seed will not be used or sold for seed, breeding, or any variety or hybrid development or improvement purposes; these restrictions apply to all plants produced from Seed, including without limitation variant and inbred plants and Seed that may be contained in this package or grow from Seed. User acknowledges MS TECH and its suppliers have a proprietary interest in the use of subsequent production from the Seed and agrees it would be a violation of this Agreement to allow the subsequent production of the Seed to be used to create any seed variety or seed product from said production. Any export of this Seed or its progeny from the country of purchase is strictly prohibited, except that forage or grain may be exported solely for use in feeding or processing.

User agrees and acknowledges that any use of the Seed, which is forbidden by this Agreement will constitute a misappropriation of the property of MS TECH and its suppliers and will therefore result in a breach of this Agreement. User agrees that MS TECH and/or its suppliers may bring an action to recover damages as a result of the breach of this Agreement, along with reasonable attorney fees and costs associated with any action commenced in regard thereto. User further agrees that the exclusive venue for any dispute arising under this Agreement or in connection to any breach thereof shall be in the federal or state courts for Dallas County, Iowa and hereby irrevocably consents to the personal jurisdiction of such courts. This Agreement shall be governed under the laws of the State of Iowa.

User agrees and acknowledges that any use of the Seed, which is forbidden by this Agreement, will damage MS TECH and its suppliers' legitimate expectation of future sales of seed and any use of Seed in violation of this Agreement will constitute an attempt to intentionally injure or destroy MS TECH and its suppliers' prospective business expectations in future sales of seed.

User agrees and acknowledges that any use of Seed from MS TECH in violation of this Agreement will cause substantial damage to MS TECH and/or its suppliers and that if subsequent production of the Seed is used to create a seed variety or seed product, substantial damage to MS TECH and or its suppliers for all seed varieties or seed products thereby created will be caused. This Agreement shall not limit any other rights, legal or equitable, that MS TECH and its suppliers have but shall be accumulative.

User agrees to only use agricultural herbicide that are expressly labeled for use in conjunction with the Seed and have received government approvals as specified in a product use guide.

NOTICE OF REQUIRED ARBITRATION

Under the seed laws of several states arbitration, mediation or conciliation is required as a prerequisite to maintaining a legal action based upon the failure of seed to produce as represented. The consumer shall file a complaint along with the required filing fee (where applicable) with the Commissioner/Director/Secretary of Agriculture, Seed Commissioner, or Chief Agricultural Officer within such time as to permit inspection of the crops, plants or trees by the designated agency and the seller from whom the seed was purchased. A copy of the complaint shall be sent to the seller by certified or registered mail or as otherwise provided by state statute.

OTHER TERMS & CONDITIONS

For sale in the U.S. only. MS TECH assumes no responsibility for MS TECH's supplier's, distributor's or dealer's verbal and/or written claims, promises, warranties or actions which are contrary to MS TECH's normal operating policies. USER must notify MS TECH within fourteen (14) days of becoming aware of alleged issues regarding the quality or performance of the Seed.

LIMITATION OF WARRANTIES & DAMAGES

MS TECH warrants, to the extent of the purchase price and to the extent that the packaging and label have not been compromised, that the Seed is as described on the package and on the tag attached thereto within recognized tolerances. MS TECH gives no other WARRANTY, expressed or implied, of MERCHANTABILITY or FITNESS of the Seed for any particular purpose, nor any warranty against loss due to any cause, including environmental conditions, soil conditions, chemicals or farming practices, or the response of the Seed to any such conditions. MS TECH shall not be liable for incidental or consequential damages, including loss of profits. MS TECH'S LIABILITY for damages for any cause, including breach of contract, breach of warranty and negligence, with respect to the sale of seed is LIMITED to the purchase price of the Seed. THIS REMEDY IS EXCLUSIVE. BY ACCEPTANCE OF THIS SEED OR OPENING THIS PACKAGE, USER ACCEPTS THE TERMS HEREIN. IF USER DOES NOT AGREE WITH THESE TERMS AND CONDITIONS, USER MUST RETURN THE ORIGINAL UNOPENED SEED PACKAGE TO MS TECH WITHIN TWENTY DAYS OF RECEIPT AND USER'S SOLE REMEDY SHALL BE FOR REFUND OF THE USER'S ORIGINAL PURCHASE PRICE. MS TECH may modify and amend the terms and conditions of this Agreement without notice and in its sole discretion.

MS TECH has utilized standard industry isolation and purity procedures in the production of seed products. Because of contamination factors beyond MS TECH's control, MS TECH cannot warrant or represent that MS TECH seed products are free of other transgenic corn traits or transgenic soybean traits. Words and phrases herein shall be construed as in the singular or plural number, according to the context.

ENLIST E3®

PRODUCT USE STATEMENT: Enlist E3® soybeans contain the Enlist E3 trait that provides crop safety for use of labeled over-the-top applications of glyphosate, glufosinate and 2,4-

herbicides featuring Colex-D® technology when applied according to label directions. Following burndown, the only 2,4-D containing herbicide products that may be used with Enlist™ crops are products that feature Colex-D technology and are expressly labeled for use on Enlist crops. 2,4-D products that do not contain Colex-D technology are not authorized for use in conjunction with Enlist E3 soybeans. WARNING: Enlist E3 soybeans are tolerant of over-the top applications of glyphosate, glufosinate and 2,4-D. Accidental application of incompatible herbicides to this variety could result in total crop loss. When using 2,4-D herbicides, grower agrees to only use 2,4-D products that contain Colex-D technology authorized for use in conjunction with Enlist E3 soybeans. Always read and follow herbicide label directions prior

to use.

YOU MUST SIGN A TECHNOLOGY AGREEMENT, READ THE PRODUCT USE GUIDE PRIOR TO PLANTING AND FOLLOW HERBICIDE RESISTANCE MANAGEMENT (HRM)

REQUIREMENTS THIS SEED IS ACQUIRED UNDER AN AGREEMENT THAT INCLUDES THE FOLLOWING TERMS: These seeds are covered under Corteva Agriscience and MS Technologies Patent Rights which can be found at: www.traitstewardship.com. The purchase of these seeds includes a limited license to produce a single crop in the United States (or other applicable country). The use of seed from such a crop or the progeny thereof for propagation or seed multiplication or for production or development of a hybrid or different variety of seed is strictly prohibited.

PLEASE READ CAREFULLY. By opening this bag or planting this seed, you acknowledge and agree to the following terms, personally and on behalf of the individual or entity that purchased this seed ("Grower"), to be bound by the terms and conditions of the following documents in effect at the time of planting of this seed: (i) the Technology Use Agreement and (ii) the Product Use Guides for all technologies in this seed, including the Herbicide Resistance Management (HRM) and Use requirements detailed therein (www.corteva.us/Resources/trait-stewardship.html).

To plant this seed, you must have a limited license from Corteva Agriscience (or other appropriate affiliates). No license or sublicense is conveyed to use these seeds solely by the purchase/bailment/transfer of such seeds. In consideration of the foregoing, Corteva Agriscience grants to the Grower the limited license to use its technology to produce only a single commercial crop in the United States under the terms and conditions set forth in the Technology Use Agreement in effect at the time of planting of this seed.

Corteva Agriscience is a member of Excellence Through Stewardship® (ETS). Corteva Agriscience products are commercialized in accordance with ETS Product Launch Stewardship Guidance and in compliance with the Corteva Agriscience policies regarding stewardship of those products. In line with these guidelines, our product launch process for responsible launches of new products includes a longstanding process to evaluate export market information, value chain consultations and regulatory functionality. Growers and endusers must take all steps within their control to follow appropriate stewardship requirements and confirm their buyer's acceptance of the grain or other material being purchased. For more detailed information on the status of a trait or stack, please visit www.biotradestatus.com. Excellence Through Stewardship® is a registered trademark of Excellence Through Stewardship.

The transgenic soybean event in the Enlist E3® soybean is protected under Corteva Agriscience and M.S. Technologies, L.L.C. Patent Rights which can be found at: www.corteva.us/Resources/trait-stewardship.html. The purchase of these seeds conveys no license under said patents to use these seeds. The transgenic soybean event in Enlist E3® soybeans is jointly developed and owned by Corteva Agriscience and M.S. Technologies, L.L.C. ®™ Enlist, Enlist E3, the Enlist E3 logo and Colex-D are trademarks of Dow AgroSciences LLC. Excellence Through Stewardship is a registered trademark of Excellence Through Stewardship. Corteva Agriscience

9330 Zionsville Road, Indianapolis, IN 46268

1-877-4-TRAITS (1-877-487-2487)

Americas Alfalfa®

In the following states, purchase and use of HarvXtra® Alfalfa with Roundup Ready® Technology is subject to a Seed and Feed Use Agreement, requiring that products of this technology can only be used on farm or otherwise be used in the United States: Arizona, California, Colorado, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington and Wyoming. In addition, due to the unique cropping practices do not plant HarvXtra® Alfalfa with Roundup Ready® Technology or Roundup Ready® Alfalfa in Imperial County, California, pending import approval and until Forage Genetics International, LLC (FGI) grants express permission for such planting.

Roundup Ready® Alfalfa and HarvXtra® Alfalfa with Roundup Ready® Technology have pending import approvals. GROWERS MUST DIRECT ANY PRODUCT PRODUCED FROM HARVXTRA® ALFALFA WITH ROUNDUP READY® TECHNOLOGY SEED OR CROPS (INCLUDING HAY AND HAY PRODUCTS) ONLY TO UNITED STATES DOMESTIC USE. It is a violation of national and international law to move material containing biotech traits across boundaries into nations where import is not permitted. Growers should talk to their grain handler or product purchaser to confirm their buying position for this product.

Visit www.ForageGenetics.com/legal for the full legal, stewardship and trademark statements for these products.

Merschman Seeds and Design™, Starting Line™, Your Friend in the Field® and Merschman Order Guarantee and Design™ are trademarks of Merschman Seeds, Inc.

Merschman Brand Soybean and Wheat Seed Purchase Agreement

Supplier represents and Purchaser hereby acknowledges that Supplier is engaged in the business of developing and supplying for sale various varieties of soybean and wheat seeds. Supplier has a substantial investment in the development and production of the Merschman Brand Soybean and Wheat Seeds herein sold. Supplier has expended substantial effort in developing a market for Merschman Brand Soybean and Wheat Seeds. Supplier has existing contractual relationships with other purchasers and growers for the sale of Merschman Brand Soybean and Wheat Seeds and expectation of additional contracts for sale of Merschman Brand Soybean and Wheat Seeds in the future. The purchase of the seeds includes a limited license under the U.S. patents on the bag and seed tag to produce a single crop.

In consideration of the foregoing and in consideration of the Merschman Brand Seeds herein sold, Purchaser hereby acknowledges and agrees that the production from the Merschman Brand Soybean and Wheat Seeds herein sold will be used only for feed or processing and will not be used or sold for seed, breeding, or any variety improvement purposes. Purchaser acknowledges Supplier's proprietary interest in the use of the subsequent production from the seeds herein sold and agrees it would be a violation of this agreement to allow the subsequent production of the seeds herein sold to be used to create a seed variety or seed product from said production, which may be used for seed purposes by individuals or entities other than Merschman Seeds, Inc. Purchaser agrees and acknowledges that any use of Merschman Brand Soybean and Wheat Seeds, which is forbidden by this agreement, will constitute a misappropriation of the personal property of Merschman Seeds, Inc. and will therefore result in a breach of this agreement, subjecting Purchaser to a claim for damages, along with reasonable attorney fees and costs associated with any action commenced in regard thereto.

Purchaser agrees and acknowledges that any use of Merschman Brand Soybean and Wheat Seeds forbidden by this agreement will damage Supplier's legitimate expectation of future sales of soybean and wheat seeds and any use of Merschman Brand Soybean and Wheat seeds in violation of this agreement will constitute an attempt to intentionally injure or destroy Supplier's prospective business expectations in future sales of Merschman Brand Soybean and Wheat Seeds. Export of this seed or its progeny from the United States is prohibited except that the grain may be exported solely for the use in feeding or processing.

Purchaser agrees and acknowledges that any use of Merschman Brand Soybean and Wheat Seeds in violation of this agreement will cause a minimum damage to Merschman Seeds, Inc. of $10.00 per bushel so used and that if subsequent production of the seed herein sold is used to create a seed variety or seed product, a minimum damage to Merschman Seeds, Inc. of $10.00 per bushel for all seed varieties or seed products thereby created will be caused. This agreement shall not limit any other rights, legal or equitable, that the Supplier has but shall be accumulative.

The receipt of this contract, properly signed, without immediate notice of misunderstanding in writing by registered mail addressed to the dealer, will be considered as confirmation of the above order. This contract is not subject to any changes or cancellation without the mutual consent of the dealer, customer and Merschman Seeds, Inc. No liability is assumed by Merschman Seeds, Inc. for delay or failure to deliver caused by war, strikes, fires, floods, embargoes, or other causes beyond their control.

Warranty

Merschman Seeds, Inc. and dealer warrant, to the extent of the purchase price, that seed is as described on the bag and on the tag attached thereto, within recognized tolerances. Merschman Seeds, Inc. and dealer give no other WARRANTY, expressed or implied, of MERCHANTABILITY or FITNESS of the seed for any particular purpose, nor any warranty against loss due to any cause, including environmental conditions, soil conditions, chemicals or farming practices or the response of the seed to any such conditions. Neither Merschman Seeds, Inc., nor dealer shall be liable for incidental or consequential damages, including loss of profits, even if foreseen. LIABILITY for damages for any cause, including breach of contract, breach of warranty and negligence, with respect to the sale of seed, is LIMITED to the purchase price of the seed. THIS REMEDY IS EXCLUSIVE. Purchaser accepts these terms unless he returns the seed within fifteen days for refund of the purchase price. Merschman Seeds, Inc., has utilized standard industry isolation and purity procedures in the production of conventional seed products. Because of contamination factors beyond the company's control, Merschman Seeds, Inc., cannot warrant or represent that Merschman Seeds products are free of genetically modified organisms.

Finance Charge

Purchases not paid when due will be assessed FINANCE CHARGES computed by a single "periodic rate" of 1% per month which is an ANNUAL PERCENTAGE RATE of 12%, applied to all past due amounts AFTER deducting the current payments and credits. Minimum monthly finance charge - $1.00

Governing Law, Situs of Suit, Waiver of Jury, Arbitration

This agreement is made in accordance with the laws of the state of Iowa. All accounts shall be governed by and construed under Iowa law as applied to agreements entered into and performed in Iowa by Iowa residents. Exclusive jurisdictions and exclusive venues shall be in North Lee County (Fort Madison), or Dallas County IA and Iowa law shall apply. THE PARTIES HERETO VOLUNTARILY AND INTENTIONALLY WAIVE THE RIGHT TO JURY TRIAL ON ANY ISSUE OR DISPUTE THAT MAY ARISE BETWEEN THEM.

2. Under the seed laws of several states arbitration, mediation, or conciliation is required as a prerequisite to maintaining a legal action based upon the failure of seed to produce as represented. The consumer shall file a complaint along with the required filing fee (where applicable) with the Commissioner/Director/Secretary of Agriculture, Seed Commissioner, or Chief Agricultural Officer within such time as to permit inspection of the crops, plants or trees by the designated agency and the seller from whom the seed was purchased. A copy of the complaint shall be sent to the seller by certified or registered mail or as otherwise provided by the statute.

Guaranty

Customer/applicant/guarantor agrees that the foregoing is given for the express purpose of obtaining commercial credit from Merschman Seeds, Inc. and the same is certified to be true. Customer/applicant/guarantor hereby unconditionally guarantees payment when due to Merschman Seeds, Inc. of any kind and all present or future indebtedness owed to Merschman Seeds, Inc.

The acceptance of delivery constitutes consent to the published and invoiced terms and conditions of sale.

Customer authorizes Merschman Seeds, Inc. to convert any check received electronically (fax, email, text, etc.) into an exact replica of my/our check without changes to the amount or account number and to deposit that replica check in the normal course of business.

To the extent allowed by law, there will be a $20.00 service charge

for any check that is returned unpaid.

All credit sales are single payment obligations as of the net due

date without privilege to pay in installments.

All decisions with respect to extension or continuation of credit

shall be in the sole discretion of Merschman Seeds, Inc.

In case of suit, action or proceeding for the collection of account, customer/applicant/guarantor promises and agrees to pay Merschman Seeds, Inc. all fees and costs including reasonable attorney's fees as allowed by law to be fixed by the trial court and if any appeal is taken from any decision of the trial court, such further sums as may be fixed by the appellate court, as Merschman Seeds, Inc. reasonable attorney's fees in the appellate court.

New Seed Doesn't Cost...It Pays

Extensive third-party research has demonstrated that the cost of planting saved soybean seed can meet — or even exceed — the cost of purchasing new seed. Factors considered include cleaning, bagging and hauling saved seed, the opportunity cost associated with not selling one bushel of soybeans and a documented yield disadvantage of 1.8 bushels per acre compared with purchasing new, high-yielding seed.

Growers purchasing new seed from Merschman Seeds® gain access to the following benefits:

Yield. Planting newly purchased seed ensures that you are using the latest and highest-yielding genetics available for maximum yields.

Access to the latest technology. Purchasing new seed ensures access to the latest seed technologies on the market today.

Reliable germination and quality. Branded seed has been rigorously tested for quality, has been properly stored and conditioned and is free of seedborne diseases.

Customer service. Purchased seed comes in convenient packaging and brings access to dealer agronomic support both before and after the sale.

The purchase of new seed from Merschman Seeds® provides a grower with the industry's newest elite germplasm, which has been rigorously tested to Merschman's strict quality standards. Merschman Seeds® can provide its customers with a reliable supply in most maturities.

Most soybeans are covered by varietal patents, which do not allow you to save and plant the seed from those varieties without a license. Dollars paid on the purchase of new seed provide funding for research and development of new traits and higher yielding germplasm. Merschman Seeds Inc. and its trait providers such as LibertyLink are committed to our customer's success.

Saltro®

MERSCHMAN SEEDS®

YOUR FRIEND IN THE FIELD®

merseeds@merschmanseeds.com ▪ merschmanseeds.com ▪ 319-837-6111


MERSCHMAN
SEEDS®
103 Ave D ▪ PO Box 67
West Point, IA 52656
319-837-6111 ▪ 800-848-SEED
merschmanseeds.com
merseeds@merschmanseeds.com
@MerschmanSeeds