

Innovation in Tomato and Pepper

John Schramski

Market Development Representative

Midwest



Tomato

*/// Vegetables
by Bayer*

Seminis Plus Series Tomatoes



Classic Series

- Better Boy
- Big Beef
- Celebrity
- Lemon Boy

Improved Flavor



Disease Resistance



Plus Series

- Better Boy Plus
- Big Beef Plus
- Celebrity Plus
- Lemon Boy Plus

Better Boy Plus (SVTH3452)



- *Higher brix, quality, and fruit setting than original Better boy*
- *Robust disease package*
- *Juicy fruit with unbeatable flavor*
- *Large and firm fruits*
- *Low radial cracking*
- *Healthy and vigorous plant*
- *Highly adaptable*



DISEASE RESISTANCE

(HR) ToMV:0-2/Aal/Fol:1/For/Sbl/SI/Ss/Va:1;
(IR) TSWV:0/Ma/Mi/Mj

Avg. Brix	Shape	Avg. Weight	Segment	Ext. Color	Plant Type	Vigor	Maturity
6.5	Round	180-230 g	XL	Red	Indeterminate	Strong	80 Days

Key to Disease Resistance: Aal = Alternaria stem canker; Fol = Fusarium wilt; For = Fusarium crown and root rot; Ma/Mi/Mj = Southern root-knot nematode; Sbl/SI/Ss = Gray leaf spot; ToMV = Tomato mosaic; TSWV = Tomato spotted wilt virus; Va/Vd = Verticillium wilt.

HR = High Resistance. IR = Intermediate Resistance. To find out more about disease resistance and the applicable levels of disease resistance, visit www.worldseed.org, and view the "Definition of the Terms Describing the Reaction of Plants to Pests for the Vegetable Industry" paper in the Vegetable Resources section.

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Big Beef Plus (SVTH3438)



- *Crimson gene provides deeper red internal gel*
- *Larger fruit size than original Big Beef*
- *Enhanced flavor*
- *Refined fruit appearance and quality*
- *Improved disease package*
- *Highly adaptable*



DISEASE RESISTANCE

(HR) ToMV:0-2/ToTV/Aal/Fol:0,1/For/Sbl/SI/Ss/Va:0/Vd:1

Avg. Brix	Shape	Avg. Weight	Segment	Ext. Color	Plant Type	Size	Maturity
5.4	Round	210-240 g	XXL	Red	Indeterminate	Beef	75 Days

Key to Disease Resistance: Aal = Alternaria stem canker; Fol = Fusarium wilt; For = Fusarium crown and root rot; Ma/Mi/Mj = Southern root-knot nematode; Sbl/SI/Ss = Gray leaf spot; ToMV = Tomato mosaic; TSWV = Tomato spotted wilt virus; Va/Vd = Verticillium wilt.

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Lemon Boy Plus (SVTH3445)



- *Unique yellow color*
- *Sweet, tangy flavor*
- *Higher average degrees brix than original Lemon Boy*
- *Firm fruit with less radial cracking and better shelf life*
- *Uniform fruit shape and size*
- *Improved disease package*
- *Quality fruit for any dish and salad*



DISEASE RESISTANCE

(HR) ToMV:0-2/ToTV/AaI/Ff:B,D/Fol:1-3/For/SbI/SI/Ss/Va:1/Vd:1

Avg. Brix	Shape	Avg. Weight	Segment	Ext. Color	Plant Type	Maturity
6.6	Round	160-200 g	XL	Yellow	Indeterminate	75 Days

Key to Disease Resistance: AaI = Alternaria stem canker; Fol = Fusarium wilt; For = Fusarium crown and root rot; Ma/Mi/Mj = Southern root-knot nematode; SbI/SI/Ss = Gray leaf spot; ToMV = Tomato mosaic; TSWV = Tomato spotted wilt virus; Va/Vd = Verticillium wilt.

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Celebrity Plus (SVTD4081)



- *Retains many characteristics of Celebrity*
- *Added value of Tomato Spotted Wilt Virus resistance*
- *Higher average degrees brix than original Celebrity*
- *Smooth fruit with outstanding flavor*
- *Improved shape and size uniformity*
- *Larger fruit size*
- *Widely adaptable*



DISEASE RESISTANCE

**(HR) ToMV:0-2/Aal/Fol:1,2/Sbl/SI/Ss/Va:1/Vd:1;
(IR) TSWV:0/Ma/Mi/Mj**

Avg. Brix	Shape	Avg. Weight	Segment	Ext. Color	Plant Type	Vigor	Maturity
5.4	Flat (Deep Oblate)	200-240 g	XL	Red	Semi-Determinate	Moderate	80 Days

Key to Disease Resistance: Aal = Alternaria stem canker; Fol = Fusarium wilt; For = Fusarium crown and root rot; Ma/Mi/Mj = Southern root-knot nematode; Sbl/SI/Ss = Gray leaf spot; ToMV = Tomato mosaic; TSWV = Tomato spotted wilt virus; Va/Vd = Verticillium wilt.

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And the tomato adventure continues.....

Purple Boy



- *Unique, heirloom-like hybrid*
- *Beautiful purple color*
- *Rich, traditional flavor reminiscent of heirloom types*
- *Improved vigor and disease resistance*
- *Strong plant characteristics*
- *Highly adaptable*



DISEASE RESISTANCE
(HR) ToMV:0-2/Fol:1/For/Va:1/Vd:1;
(IR) Ma/Mi/Mj

Size	Shape	Avg. Weight	Segment	Ext. Color	Plant Type	Vigor	Maturity
Beef	Round	120-230 g	XL	Purple	Semi-Indeterminate	Moderate	72 Days

Key to Disease Resistance: Aal = Alternaria stem canker; Fol = Fusarium wilt; For = Fusarium crown and root rot; Ma/Mi/Mj = Southern root-knot nematode; Sbl/Si/Ss = Gray leaf spot; ToMV = Tomato mosaic; TSWV = Tomato spotted wilt virus; Va/Vd = Verticillium wilt.

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Pink Delicious (SVTG0347)



- *Giant heirloom-style tomato*
- *Beautiful pink color*
- *Heavenly flavor*
- *High average fruit weight*
- *Low radial cracking*
- *Good disease resistance package*



DISEASE RESISTANCE
(HR) ToMV:0-2/SbI/SI/Ss/Va:1/Vd:1

Size	Shape	Avg. Weight	Segment	Ext. Color	Plant Type	Vigor	Maturity
Beef	Flat (Deep Oblate)	250-300 g	XL	Pink	Indeterminate	Moderate	74 Days

Key to Disease Resistance: Aal = Alternaria stem canker; Fol = Fusarium wilt; For = Fusarium crown and root rot; Ma/Mi/Mj = Southern root-knot nematode; SbI/SI/Ss = Gray leaf spot; ToMV = Tomato mosaic; TSWV = Tomato spotted wilt virus; Va/Vd = Verticillium wilt.

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Pepper

/// Vegetables
by Bayer

Current Pepper Portfolio



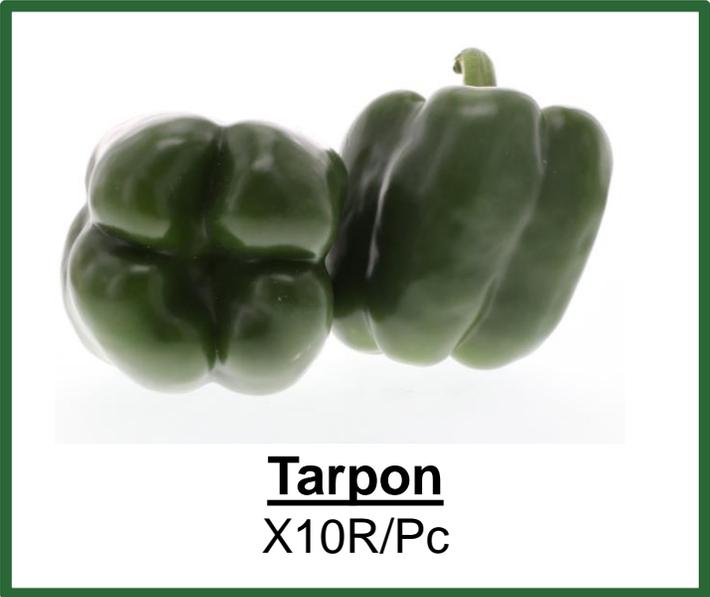
Bell Peppers

- **Tarpon**
- **Sailfish**
- **Aristotle**
- **PS 09941819**
- **PS 09979325**
- **Turnpike**
- **Red Knight**
- **Playmaker**
- **SV3255PB**
- **Antebellum**
- **SV3964PB**
- **SVPB8415**

Specialty Peppers

- **Panuco** – Jalapeno
- **Tzotil** – Jalapeno
- **SV7017HJ** – Jalapeno
- **SV3198HJ** – Jalapeno
- **Fury** – Hungarian Yellow Wax
- **Sopron** – Banana
- **Time Bomb** – Hot Cherry
- **Mesilla** – Cayenne
- **Roulette** – Habanero
- **Inferno** – Hot Wax
- **Super Chili** – Chili
- **Spitfire** – Anaheim

Colored Bell Peppers



Mini-Pointed Pepper, Orange: SVPS0953



First X10R® orange mini-pointed pepper for the Eastern U.S. open field with early maturity, good shape, size uniformity, excellent color, and preferred eating quality.

- *X10R® resistance*
- *Early maturity*
- *Continuous fruit set*
- *Protect yield under disease conditions*
- *Improved disease package for better quality and longevity*
- *Early market entry*
- *Good fruit size and shape uniformity*
- *Improved consumer preference*



DISEASE RESISTANCE
(HR) Tm:0; (IR) Xcv:0-10

Key to Disease Resistance: Tm = Tobamovirus; Xcv = Bacterial leaf spot. X10R® technology provides intermediate resistance to bacterial leaf spot races 0-10.

HR = High Resistance. IR = Intermediate Resistance. To find out more about disease resistance and the applicable levels of disease resistance, visit www.worldseed.org, and view the "Definition of the Terms Describing the Reaction of Plants to Pests for the Vegetable Industry" paper in the Vegetable Resources section.

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Mini-Pointed Pepper, Red: SVPS0897



First X10R® red mini-pointed pepper for the Eastern U.S. open field. Vigorous plant with continuous fruit set, good fruit size, uniformity, and excellent yield potential.

- *X10R® resistance*
- *Vigorous plant*
- *Continuous fruit set*
- *Protect yield under disease conditions*
- *Improved disease package for better quality and longevity*
- *Early harvest*
- *Good fruit size, shape, and yield throughout the season*
- *Similar to or better consumer preference*



DISEASE RESISTANCE
(HR) Tm:0; (IR) Xcv:0-10

Thank you.

<https://www.vegetables.bayer.com>

→ Resources → Agronomic Spotlights

Interested in trialing? Contact your local Seminis rep!



HM • CLAUSE

**Tomatoes
and
Peppers**

Great Lakes Expo





Agenda



- 1. Introductions**
- 2. HM.CLAUSE/Dealer Overview**
- 3. Varieties**
- 4. Questions/Comments**
- 5. Thank you**



Introductions

Your Northeast Fresh Market HM.Clause Sales Team

NORTHEAST USA & CANADA

Regional Manager: John Molyet

MP: 419.902.0414

j.molyet@hmclause.com

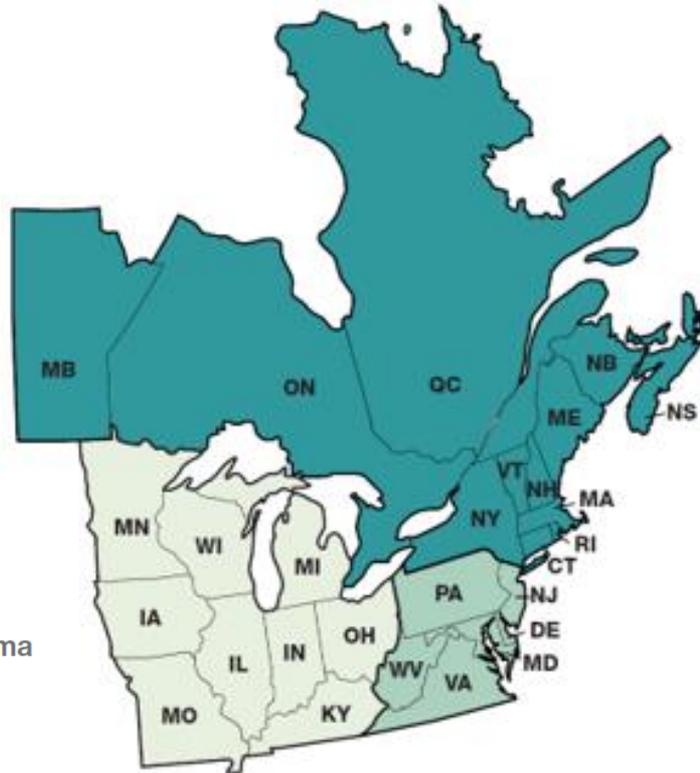
NORTHEAST USA & CANADA

Product Development Specialist:

Steven Valdez

MP: 717.405.4599

Steven.valdez@hmclause.com



GREAT LAKES & MIDWEST

Technical Sales Rep: Ryan Kingma

MP: 317.900.2955

ryan.kingma@hmclause.com

NEW ENGLAND & EASTERN CANADA

Technical Sales Rep: Michael Ferlito

MP: 315.591.7504

Michael.Ferlito@hmclause.com

MID-ATLANTIC

Technical Sales Rep: Kristin Barrall

MP: 302.381.3404

k.barrall@hmclause.com



HM.Clause and Dealer Overview

We are Global, we are local, we are HM.CLAUSE

We specialize in the breeding, production, and sales of vegetable seeds. From the world market to the farmer's market, we collaborate with our customers to deliver successful solutions for the agricultural challenges of today and produce the highest quality seeds for the future. Our global team of experts and state-of-the-art research facilities enable us to work side-by-side with growers to provide the most regionally relevant and reliable vegetable seeds available.



Company History

HM.CLAUSE is a business unit of Limagrain, an international co-operative agricultural group, specializing in field seeds, vegetable seeds and cereal products. With a team of 2,800 professionals in over 30 countries, we are dedicated to the sustainable solutions for the land, successful products for our customers, and intensive research and innovations for the future.

HM.CLAUSE was formed in 2008, combining our two commercial brands, HARRIS MORAN in the USA and CLAUSE in France. However, the company roots go back to 1785, with its founding organization, Tezier. Our brands represent the best of all worlds, combining know-how, expertise and resources to create an exceptional company, doing extraordinary work.

As a global company, each and every one of us is genuinely invested in our customers' success and the future of our industry. We work to demonstrate our values of teamwork, collaboration, transparency and accountability in every office, laboratory, facility, farm and field, in each and every region, every day of the year.





Species Presentation

Tomatoes

Harris Moran tomatoes are some of the best on the market. Start off the season with our tasty Primo Red and Red Deuce and move into the main-season with Red Mountain and Red Morning. Finish the growing season with the ever-reliable Mountain Fresh Plus. Round off your tomato operation with Pony Express and Davinci saladette.



Globe Tomato



Primo Red

- Some of the first fruit to market due to its very early maturity
- Very determinate vine
- Recognized for its flavor
- Responds well to higher nutrient management
- Harvest for the first couple weeks and then move on

PRIMO RED F1 (HMX 7838)

Fresh market,
determinate, round

Very XLarge
vine ripe
tomato



FEATURES

- PLANT COMPACT, EARLY MATURING WITH AN EXTENDED BET
- FRUIT QUITE SMOOTH, GLOBE, WITH GOOD COLOR
- EXCELLENT VINE RIPE TOMATO FOR EARLY PLANTING
- COMPACT VINE DOES WELL WITH HIGHER FERTILIZER MANAGEMENT
- RESPONDS WELL TO HORMONE INDUCED FRUIT SETTING, CROWN FRUIT MAY SHOW SOME PRONOUNCED BLOSSOM ENDS

Maturity	Fruit Shape	Fruit Size	Fruit Color
Very Early	Deep Globe	Large - Extra Large	Red

DISEASE RESISTANCE CHART (HR=High Resistance, IR=Intermediate Resistance)

HR/IR	Common name	Abbreviation	Pathogen / Causal Agent
HR	Verticillium wilt	Vd:1 (EUR:0) Vs:1 (EUR:0)	<i>Verticillium albo-atrum</i> , <i>V. dahliae</i>
HR	Fusarium wilt	Fo:1,2	<i>Fusarium oxysporum f.sp. lycopersici</i>
HR	Tomato mosaic	ToMV	Tomato mosaic virus
IR	Tomato spotted wilt	TSWV:TO	Tomato spotted wilt virus

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Data and disease ratings are an average of results from various test locations. It is not a prediction of future performance, but a summary of past results. Your performance will vary depending on the actual environment, pathogen strain and management conditions in your field. You must read and understand the HM.CLAUSE, Inc. Limitation of Warranty and Liability (found at www.harris-moran.com) before using this product.

Globe Tomato



Red Deuce

- Second to mature in the early slot
- Large and XL fruit with good internal quality
- Perfect for sandwich slices or salad wedges
- Good to use in a low-tech environment
 - Long harvest window in high tunnels

RED DEUCE F1 (HMX 0821)

Fresh Market,
Determinate, Round

Second early
vine ripe with
exceptional quality



FEATURES

- MEDIUM VIGOR PLANT WITH GOOD FOLIAGE COVER
- EARLY, HIGH YIELDING VARIETY FOR VINE RIPE HARVEST
- X-LARGE UNIFORM SMOOTH FRUIT WITH VERY GOOD QUALITY

Maturity	Fruit Shape	Fruit Weight	Fruit Color
Early (2nd early)	Globe	Extra Large	Red

DISEASE RESISTANCE CHART (HR=High Resistance, IR=Intermediate Resistance)			
HR/IR	Common name	Abbreviation	Pathogen / Causal Agent
HR	Verticillium wilt race 1	Vd:1 (EUR:0) Va:1 (EUR:0)	<i>Verticillium dahliae</i> r.1
HR	Fusarium wilt race 1,2	Fo: 1,2	<i>Fusarium oxysporum</i> f.sp. <i>lycopersici</i> r.1,2
HR	Tomato Mosaic Virus	ToMV	Tomato Mosaic Virus
HR	Alternaria Stem Canker	Aa	<i>Alternaria alternata</i> f. sp. <i>lycopersici</i>

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Globe Tomato



Red Mountain

- High quality fruit for the main season.
- Determinate plant with a compact habit for ease of harvest
- High yields and easy picking
- Good disease package

Red Mountain

(HMX 2835)

Determinate round tomato with excellent quality



FEATURES

- SECOND EARLY MATURITY
- COMPACT PLANT
- HIGH-QUALITY, UNIFORM FRUIT WITH SMOOTH SHOULDERS

Maturity	Plant Habit	Plant Cover	Fruit Shape	Fruit Color
Second Early	Compact	Very Good	Round	Deep Red

DISEASE RESISTANCE CHART (HR=High Resistance, IR=Intermediate Resistance)			
Rating	Common Name	Abbreviation	Pathogen/Causal Agent
HR	Verticillium wilt	Vd	<i>Verticillium dahliae</i>
HR	Fusarium wilt race 1,2,3	Fot: 1,2,3	<i>Fusarium oxysporum</i> f.sp. <i>lycopersici</i> r. 1,2,3
HR	Root Knot Nematode	MI	<i>Meloidogyne incognita</i>
IR	Tomato Spotted Wilt	TSWV	Tomato Spotted Wilt Virus

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Globe Tomato

Red Morning

- Main season variety
- Proven field performance and high demand
- One of the best yielders in our line-up
- Large, smooth, high quality fruit
- Medium size determinate plant with good cover

New



Red Morning F1
(HMX 2826)

High quality mid-early vine ripe tomato with TSWV resistance



FEATURES

- SMOOTH, UNIFORM, HIGH-QUALITY FRUIT
- LARGE-SIZE FRUIT
- MEDIUM-SIZE STRONG PLANT
- RESISTANCE TO TSWV

Maturity	Plant Habit	Fruit Shape	Fruit size	Fruit Color
Mid early	Med size, strong	Round	Large	Deep Red

DISEASE RESISTANCE (HR=High Resistance, IR=Intermediate Resistance, S=Susceptible)			
Rating	Common Name	Abbreviation	Pathogen/Causal Agent
HR	Fusarium wilt	FoI: 1,2	Fusarium oxysporum f. sp. lycopersici races 1,2,3
HR	Tomato mosaic	ToMV	Tomato Mosaic Virus
IR	Spotted Wilt	TSWV	Tomato Spotted Wilt Virus
HR	Verticillium Wilt	Va	Verticillium albo-atrum
HR	Verticillium Wilt	Vd	Verticillium dahlia race 1

HARRIS MORAN
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Saladette Tomato



Pony Express

- Our #1 variety used in saladette production
- Dependable variety for high yields and very good quality.
- Early maturing main season
- Use for fresh cooking or home canning

PONY EXPRESS F1
(HMX 4790)
Fresh market, determinate, saladette

A perfect combination of earliness & high yield



FEATURES

- VERY EARLY COMPACT PLANT, SUITABLE FOR GROUND AND STACKED PRODUCTION
- VERY CONCENTRATED HEAVY YIELD FRUIT WITH EXCELLENT COLOR AND FIRMNESS
- HIGH PACKOUT OF LARGE TO XLARGE FRUIT
- WIDELY ADAPTABLE TO SEVERAL GROWING REGIONS
- INTERMEDIATE RESISTANCE TO FUSARIUM RACE 3

Relative Maturity	Plant Vigor	Fruit Size	Fruit Shape	Exterior Color
Very early	Compact	Large	Elongated	Dark Red

DISEASE RESISTANCE CHART (HR=High Resistance, IR=Intermediate Resistance)			
HR/IR	Common name	Abbreviation	Pathogen / Causal Agent
HR	Tomato mosaic	ToMV	Tomato mosaic virus
HR	Verticillium wilt	Vd:1 (EUR:0) Va:1 (EUR:0)	Verticillium dahliae
HR	Fusarium wilt	Fo1,2,3	Fusarium oxysporum f.sp. lycopersici
HR	Bacterial speck	Pst	Pseudomonas syringae pv. tomato
IR	Root Knot	Ma, MI, MJ	Meloidogyne arenaria, M. incognita & M. javanica

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NEW Saladette Tomato

Davinci

- Extensive disease package for the main season
- Crimson gene for fruit color and quality
- Good for fresh or home canning



DAVINCI

US Patent Pending

A saladette masterpiece

Elongated saladette



FEATURES

- VERY HIGH FRUIT QUALITY DEMANDED BY THE MARKET
- HIGHER YIELD POTENTIAL DUE TO EXTENDED SETTING ON THE PLANT
- VERY COMPREHENSIVE DISEASE PACKAGE
- CRIMSON GENE FOR GREAT COLOR AND APPEARANCE

Relative Maturity	Fruit Shape	Fruit Size	Fruit Color
Early	Elongated saladette	Large	Bright red

DISEASE RESISTANCES (HR – HIGH RESISTANCE, IR – INTERMEDIATE RESISTANCE)			
HR/IR	Common name	Abbreviation	Pathogen causal agent
HR	Fusarium wilt	Fot-1,2,3	<i>Fusarium oxysporum f. sp. lycopersici</i>
HR	Verticillium wilt	Va-1	<i>Verticillium albo-atrum</i>
HR	Verticillium wilt	Vd-1	<i>Verticillium dahliae</i>
HR	Bacterial speck	Pst	<i>Pseudomonas syringae pv. tomat</i>
IR	Root-knot	Ma, Mi, Mj	<i>Meloidogyne arenaria</i> , <i>Meloidogyne incognita</i> , <i>Meloidogyne javanica</i>
IR	Gray leaf spot	Ss	<i>Stemphylium solani</i>
IR	Tomato mosaic	ToMV:0,1,2	Tomato mosaic virus
IR	Tomato yellow leaf curl virus	TYLCV	Tomato yellow leaf curl

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Technical data and disease resistance ratings shown are averages of results from observations at various locations, under different conditions, and laboratory tests. It is not a prediction of future performance but a summary of past results. Seed performance, yield, and crop results will vary depending on geographic areas, environment conditions and pressure, field growing and management practices, and the presence of pests or pathogens. New, unknown, and/or atypical pathogen strains may overcome the resistance of the seed. Acceptance of the HM.CLAUSE Limitation of Warranty and Liability and Use Restriction, included with our seed packages or available at www.hmclause.com, is a condition of use of all our products.

Grape Tomato

Smarty

- Uniform fruit
- Sweet snacking tomato with good flavor
- Good shelf life



SMARTY F1

(HMX 4792)

Highly uniform,
sweet grape

Indeterminate Tomato, Cherry
/ Cocktail



FEATURES

- PLANT VERY VIGOROUS WITH SHORT INTERNODES
- FRUIT HIGHLY UNIFORM IN SHAPE AND SIZE
- FRUIT FIRM WITH LONG SHELF LIFE
- EXCELLENT, SWEET TASTE

Relative Maturity	Fruit Shape	Fruit Size	Fruit Color
Medium	Mini plum	15-20 g	Deep red

DISEASE RESISTANCE CHART (HR=High Resistance, IR=Intermediate Resistance)

HR/IR	Common Name	Abbreviation	Pathogen / Causal Agent
HR	Verticillium wilt	Va:1 (EUR:0), Vd:1 (EUR:2)	Verticillium albo-atrum race 1, Verticillium dahliae race 1
HR	Fusarium wilt	Fot:1 (EU Fot:0)	Fusarium oxysporum f. sp. lycopersici race 1

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NEW Grape Tomato

Red Coral (HMX61G1772)

- Grape Tomato
- High yields
- Good Flavor
 - Good blend of brix and acid
- Determinate plant
 - Grown on 4' stake
- Resists shattering



RED CORAL

An exciting new determinate grape tomato with high yield potential and traditional tomato taste.

Tomato, determinate grape



FEATURES

- TRUE AND ORIGINAL TOMATO FLAVOR
- DETERMINATE PLANT AND CONCENTRATED SET FOR EASE OF FIELD MANAGEMENT AND HARVEST
- COMPREHENSIVE DISEASE PACKAGE FOR THE OPEN FIELD ENVIRONMENT

Relative Maturity	Fruit Shape	Fruit Color	
Early to mid-maturity	Grape	Vibrant red at maturity	
DISEASE RESISTANCES (HR – HIGH RESISTANCE, IR – INTERMEDIATE RESISTANCE)			
HR/IR	Common name	Abbreviation	Pathogen causal agent
HR	Fusarium wilt	Fol-1,2	<i>Fusarium oxysporum f.sp. lycopersici</i>
HR	Bacterial speck	Pst	<i>Pseudomonas syringae pv. tomato</i>
IR	Root-knot	Ma	<i>Meloidogyne arenaria</i>
IR	Root-knot	Mi	<i>Meloidogyne incognita</i>
IR	Root-knot	Mj	<i>Meloidogyne javanica</i>
IR	Spotted wilt	TSWV:TO	Tomato spotted wilt virus
IR	Tomato yellow leaf curl virus	TYLCV	Tomato yellow leaf curl virus

Pepper

Harris Moran peppers boasts high quality and high yields. Currier is one of the most popular varieties on the market when it comes to place pack. The addition of our new Captain marks the beginning of higher disease resistances for our program



Green Bell

Currier

- Fruit is very uniform and refined
- High quality for place pack
- Early yield
- Good disease package



CURRIER F1

Uniform, high-yield pepper with an exceptional disease package



FEATURES

- EARLY AND HIGH COMMERCIAL YIELD
- VERY CONSISTENT AND UNIFORM BLOCKY SHAPE
- SMOOTH AND GLOSSY DEEP GREEN COLOR
- NUMEROUS RESISTANCES

Maturity	Fruit shape	Fruit size	Fruit color
Early	Blocky	Large - Extra large	Green to red

DISEASE RESISTANCE CHART (#HR=High Resistance, IR=Intermediate Resistance, S=Susceptible)			
HR/IR	Common name	Abbreviation	Pathogen / Causal Agent
HR	Bacterial spot	Xcv 1,2,3	Xanthomonas campestris pv. vesicatoria
HR	Tobacco mosaic	TMV	Tobacco mosaic virus
HR	Pepper mottle	PepMoV	Pepper mottle virus
HR	Pepper yellow mosaic	PepYMV	Pepper yellow mosaic virus
HR	Potato Y	PVY: 0, 1, 1-2	Potato Y virus
IR	Cucumber mosaic	CMV	Cucumber mosaic virus

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Data and disease ratings are an average of results from various test locations. It is not a prediction of future performance, but a summary of past results. Your performance will vary depending on the actual environment, pathogen strain and management conditions in your field. You must read and understand the HM.CLAUSE, Inc. Limitation of Warranty and Liability (found at www.harris-moran.com) before using this product.

Green Bell

Karisma

- L, XL, and jumbo fruit
- Full plant for good cover
- Extended fruit set
- Good disease package



KARISMA F1

Sweet, blocky, green to red

High yield of attractive large to XL uniform pepper



FEATURES

- MEDIUM, ERECT, VIGOROUS PLANT
- EXCELLENT LEAF COVER
- FRUIT SMOOTH, GLOSSY UNIFORM, BLOCKY LARGE TO EXTRA LARGE
- HIGH YIELD, EXTENDED HARVEST

Relative Maturity	Fruit	Color	Size
Medium	Blocky	Green to red	Large to XLarge

DISEASE RESISTANCE CHART (HR=High Resistance, IR=Intermediate Resistance)

HR/IR	Common name	Abbreviation	Pathogen / Causal Agent
HR	Tobacco Mosaic	TMV	Tobacco mosaic virus
HR	Potato Y	Pvy: 0,1,1-2	Potato Y virus
IR	Pepper Mottle	PepMoV	Pepper mottle virus
IR	Pepper Yellow Mosaic	PepYMV	Pepper yellow mosaic virus
IR	Bacterial Spot	Xcv:1,2,3	Xanthomonas campestris pv. vesicatoria
IR	Cucumber Mosaic	CMV	Cucumber mosaic virus

NEW Green Bell

Captain

- BLS 1-10 and phytophthora resistance
- Medium green fruit
- XL to jumbo
- Sturdy, mid-sized plants
- High yields
- Concentrated set



CAPTAIN F1

The leader in the new generation of sweet pepper from Harris Moran that demands attention

Sweet Pepper, Blocky



FEATURES

- OFFERS BACTERIAL LEAF SPOT RESISTANCE, RACE 1-10 WITH ADDED PHYTOPHTHORA RESISTANCE
- ADAPTABLE PLANT FOR THE OPEN FIELD CONDITIONS
- DARK GREEN MATURE PEPPERS OFFERING XL TO L SIZES

Relative Maturity	Fruit Shape	Size	Fruit color
Mid-maturity	Blocky	XL to L	Dark mature green
DISEASE RESISTANCES (HR = HIGH RESISTANCE, IR = INTERMEDIATE RESISTANCE)			
HR/IR	Common name	Abbreviation	Pathogen causal agent
IR	Bacterial spot	Xcv: 1-10	<i>Xanthomonas campestris</i> pv. <i>vesicatoria</i> (races 1, 2, 3, 4, 5, 6, 7, 8, 9, 10)
IR	Phytophthora blight	Pc	<i>Phytophthora capsici</i>

Questions/Comments?





THANK YOU!