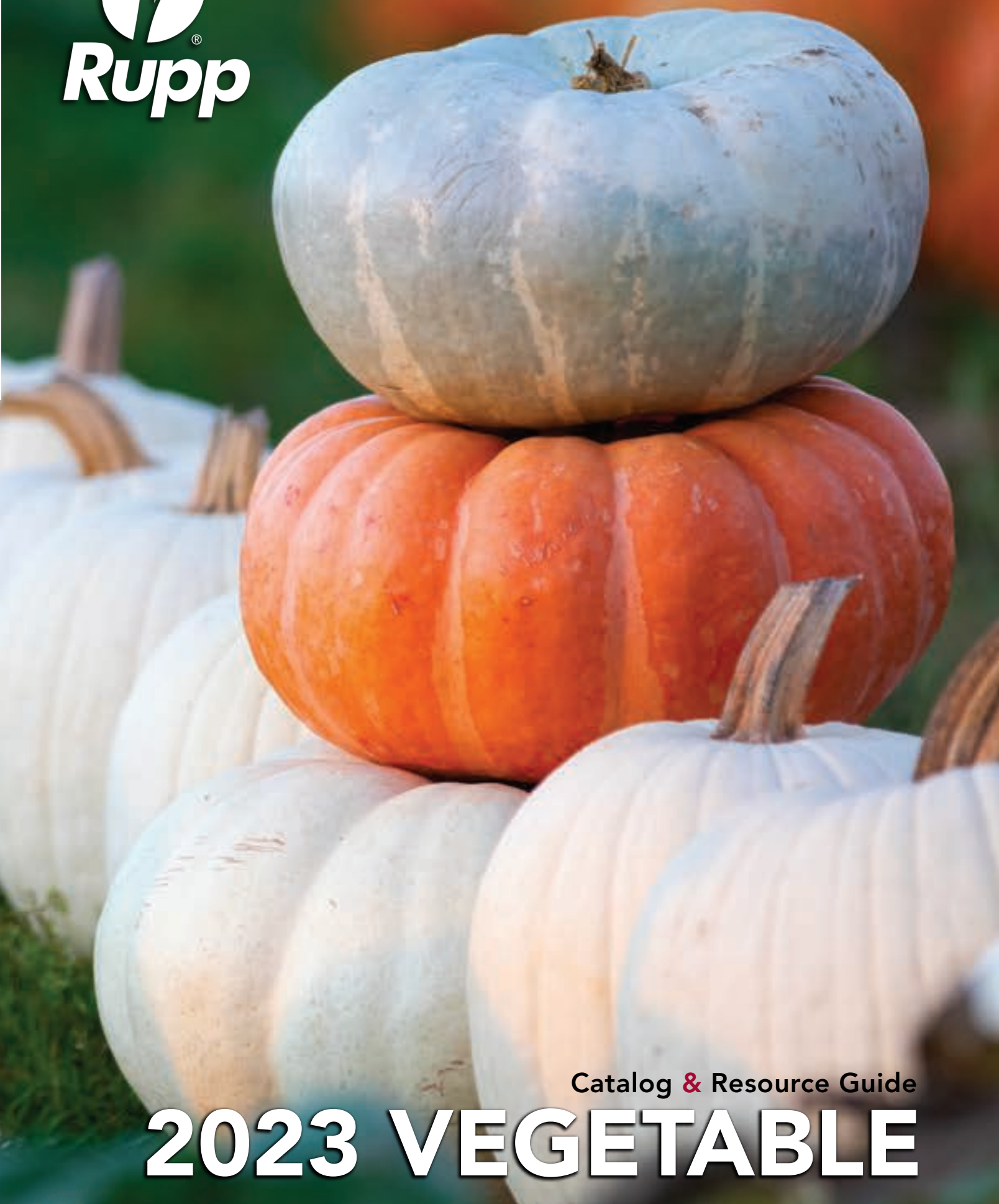




 Canadian Edition



Catalog & Resource Guide

2023 VEGETABLE

NEW PRODUCTS FOR 2023



BOLT XR pg. 36



CROWN pg. 30



GOLD STANDARD
pg. 42



MATRIARCH pg. 30



QUICKSTART pg. 35



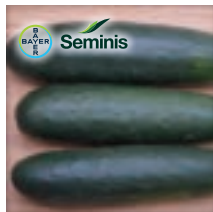
REVISION pg. 30



STARFIGHTER II pg. 28



TIGER SHARK II pg. 28



BRICKYARD pg. 48



RACEWAY pg. 48



TETON pg. 58



ARANGINA pg. 62



REDFISH X10R pg. 71



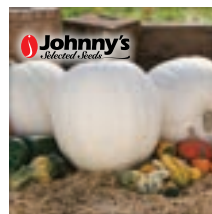
TRICKSTER pg. 79



EARLY CAPTAIN pg.
84



GRIZZLY BEAR pg. 90



POLAR BEAR pg. 92



GOLDY DOUBLE
pg. 107



UPROAR ROSE pg. 108



EARLY GIRL PLUS
pg. 111



PINK DELICIOUS
pg. 111



RAMBLER pg. 113



RUBEE GODDESS
pg. 111



SWEET GOLD pg. 114

Dear Grower,

I was glad to hear throughout the season that our grower customers were doing well. Growing conditions were favorable which made it possible to produce a good crop. Consumer demand remained strong, and with fairly stable prices, I trust that many of you had a profitable outcome.

Thank you for doing your part in helping to feed the world!

And thank you for your business and the trust you place in us.

It's obvious to all of us that costs of living have been going up, and naturally costs of producing a crop are too. I can assure you that we're doing all we can to provide you with the seed varieties you need to meet your market opportunities and consumer needs. We're offering them with seed treatments that help you establish the plant stand needed for a successful crop. And we're offering these products in a range of package sizes, so you only have to buy the amount of seed you need.

As you may expect, many seed prices are also up this year. Please know that we're looking for great products at various price points to give you options among comparable varieties, so that we can help you manage your costs of production.

This coming season, I encourage you to take advantage of our payment discount program. Details on this program are provided in the pages ahead.

As of this spring, our business is now entirely focused on serving vegetable growers. Please let us know how we can serve you better as we partner together to help feed the world.

We are thankful for the opportunity we have to serve so many wonderful people, and on behalf of our team and family, thank you for your business.

Sincerely,



Philip Rupp
President



Welcome!

We welcome the opportunity to be a part of your success. Our sales and service team is ready to assist you in planning for this coming season. Feel free to contact the salesman in your area if you need their assistance. If you live in an area without a salesman, please contact the office and a representative will be happy to assist you.

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5 WAYS to ORDER*

* Use only a **single method** to order.
(Example: If mailing order, don't place order online.)

PHONE

1-800-700-1199
(M-F 8:00 am - 5:00 pm EST)

ONLINE

www.ruppseeds.com

FAX

419-337-5491

MAIL

Rupp Seeds
17919 County Road B
Wauseon, OH 43567

EMAIL

orders@ruppseeds.com

Additional ordering information can
be found on page 132.

CASH PAYMENT DISCOUNTS

Cash discounts for orders over \$350.00.
Prepayment discount through April.
See page 130 for details.

FREE SHIPPING

If your order is over \$350 then
you qualify for FREE shipping!

TABLE OF CONTENTS

Terms and Payment Information	130
Attribute Agreement	143
GAP Certificate	127
Gold Dust Waiver	141
Letter of Guarantee	128
Order Forms	133
Remedy Agreement	144
Rupp Seeds Waiver	139

Product categories with new items for 2023 are shown in red.

A

Asparagus	7
---------------------	---

B

Beans	6
Bush Green Flat	8
Bush Green Fresh Market	7
Bush Green Home Garden	8
French Filet	8
Green Runner	9
Horticultural	9
Yellow Wax	8
Beets	10
Broccoli	12
Brussels Sprouts	14

C

Cabbage	16
Chinese	18
Chinese Pak-Choi	18
Hybrid	17
Specialty Hybrid	18
Carrots	20
Cauliflower	22
Celery	24
Collards	24

Corn	26
Performance Series™	28
Attribute®	30
Attribute® Plus	30
Attribute® II	30
Bi-Color SE	34
Bi-Color SH2 Extra Sweet & Improved Super Sweets	36
Bi-Color Synergistic	35
White SH2 Extra Sweet & Improved Super Sweets	40
White Synergistic	40
Yellow SE	42
Yellow SH2 Extra Sweet & Improved Super Sweets	43
Yellow Synergistic	42
Ornamental Corn	45
Ornamental Popcorn	43
Popcorn	44
Cucumbers	46
Pickling	47
Protected Culture	47
Slicers	48

E

Eggplant	49
--------------------	----

Endive / Escarole	49
-----------------------------	----

G

Gourds	50
Lagenaria Siceraria	51
Pepo	51

H

Herbs	53
-----------------	----

K

Kale	56
----------------	----

Kohlrabi	57
--------------------	----

L

Leek	58
----------------	----

Lettuce	58
-------------------	----

M

Melons	60
Cantaloupe Hybrid	61
Mixed/Specialty Hybrid	63
Personal Size Hybrid	63
Mustard	63

O

Okra	63
----------------	----

Onions	64
------------------	----

Ornamental	66
----------------------	----

Ornamental Corn	45
Ornamental Popcorn	43
Sorghum / Broomcorn	66

P

Parsley	67
-------------------	----

Parsnips	67
--------------------	----

Peas	68
Snow Pea Flat Oriental	69
Sugar Snap	69

Peppers	70
-------------------	----

Bell Green to Red Hybrid	71
Bell Other Colors Hybrid	73
Bell Yellow Hybrid	72
Hot Hybrid	77
Hot OP	81
Miscellaneous Hybrid	75
Miscellaneous Sweet Hybrid	74

Pumpkins	82
--------------------	----

Giant	83
Large	85
Mid Size	86
Miniature	88
Small / Pie	87
Specialty	90
White	92
Xtra Large	84

R

Radish	93
Winter / Oriental	93

S

Spinach	93
-------------------	----

Squash	94
Summer Green Hybrid	95
Summer OP	97
Summer Yellow Hybrid	97
Winter Acorn	99
Winter Buttercup / Kabocha	101
Winter Butternut	102
Winter Delicata / Sweet Dumpling	103
Winter Hubbard	104
Winter Spaghetti	105
Winter Other	106

Sunflower & Cut Flowers	107
-----------------------------------	-----

Swiss Chard	109
-----------------------	-----

T

Tomatillo	109
---------------------	-----

Tomato	110
------------------	-----

Cherry	114
Fresh Market	112
Greenhouse	115
Home Garden / Bedding	111
Processing / Saladette	115

Turnips / Rutabaga	115
------------------------------	-----

W

Watermelon	116
----------------------	-----

Icebox	117
Large Hybrid	117
Triploid	118

Non-Seed Items

B

Bin Markers	123
-----------------------	-----

C

Rupp Clothing	122
-------------------------	-----

F

Frequently Asked Questions	5
--------------------------------------	---

G

Germination Chart	125
-----------------------------	-----

Glossary	4
--------------------	---

H

High Tunnel Index	24
-----------------------------	----

High Tunnel Production	25
----------------------------------	----

I

Icon Key	4
--------------------	---

O

Online Resources	19
----------------------------	----

P

Packets	123
-------------------	-----

Planter Plates	123
--------------------------	-----

Planting guide	124
--------------------------	-----

Pumpkin Planting/Harvesting Timing Chart	81
--	----

W

Warranty Statement	129
------------------------------	-----

Winter Squash Planting/Harvesting Timing Chart	100
--	-----

ICON KEY

Cruiser - Items treated with Cruiser seed treatment are marked with this symbol and highlighted in purple in the price tables.



Documents Required

- This color coded icon marks varieties that need signed documents / waivers in order for the product to be shipped. A page number and color will direct you to the document in the back of the book.



FarMore - Items treated with FarMore seed treatment are marked with this symbol and highlighted in green in the price tables.



Game Changers - An item marked as a Game Changer is one that is gaining some traction with growers either through early release trialing or as a result of giving a new product a try. These products have the potential to become tomorrow's All Stars and bring something special to the table. These are "must try" products in this crop type.



Grower Preferred All-Stars

- Items marked with this symbol are "All Stars". They have been and will continue to perform consistently well for many growers across a wide geography. Growers really can't go wrong by planting these selections.



High Tunnel - Items marked with this symbol are recommended for high tunnel and protective culture production.



New - Most often this is a new release, but it can also be new to our lineup and not new in the market. Progressive growers that are producing other similar varieties in this product category should consider giving this a try to see if it works for them.



Rupp Logo - Our logo marks those varieties that have come from our research and development group as well as products for which we have exclusive marketing rights.



Sort Order - This symbol marks the column used to sort the information presented in each product description table. Usually alphabetical by item name or sorted by days maturity.



Vendor / Brand logos contained within are properties of their respective trademark holders.

GLOSSARY

AAS - All America Selection winner.

Anthocyaninless - Recessive gene that blocks the expression of purple pigment.

Bitterfree - (cucumbers) The plant and fruit lack cucurbitacins, a chemical, which gives a bitter taste.

Bolting - When plant begins to produce flowers and set seed.

Concentrated Ripening/Set - (tomatoes) When 80-90% of the fruit ripen within a short period of time.

Confectionery - (sunflowers) Used for human consumption.

Days from transplant - This refers to maturity from when transplants are planted outside in the field. Time from seeding to transplant will need to be added to calculate overall maturity.

Determinate - Plant habit where vine will cease to grow once it reaches a particular size.

Dwarf Indeterminate - (tomatoes) Plant habit where vine central stem continues to grow in length, but lateral branches do not.

Expansion Rate - Under ideal conditions, the number of cups of popped corn for every cup of unpopped corn.

F1 - see Hybrid

F300 - FarMore® F300, an advanced fungicide seed treatment technology, delivers protection for a variety of small-seeded vegetable crops against a broad spectrum of seed and seedling diseases.

FI400 - FarMore® FI400 provides early-season protection to prevent or eliminate damage caused by cucumber beetles.

Green Shoulder (GS) - (tomatoes) The dark green shoulder on unripe fruit, often the last area of the fruit to ripen.

Gynoeious - (cucumbers) Plant with only female flowers.

Heritage Varieties - Varieties marked heritage varieties are long standing products that have been used for generations. Mainly open pollinated (OP) varieties.

Heterosis - The improved or increased function of characteristics in a hybrid offspring. A hybrid exhibits heterosis when its traits demonstrate significant enhancement over those of its parent varieties.

Heterozygous - When the parents in a sweet corn hybrid are of different types, i.e. SU x SE, the hybrid is heterozygous. Heterozygous hybrids have better vigor in cooler soils.

Holding Ability - The period of time a fruit will maintain marketability once it has reached maturity.

Homozygous - When both parents in a sweet corn hybrid are of the same type, i.e. SE x SE, they are considered homozygous. Homozygous hybrids typically have higher sugar content.

Hybrid (F1) - Hybrid seed is produced from the cross between two genetically pure varieties, typically from the same species. Hybrids are common in agriculture, especially for

crops that benefit from heterosis, such as corn and rice. Hybrids are created as a means to combine the positive and valuable characteristics of the parent varieties into a new hybrid variety. Seed production of a hybrid occurs by controlling the pollination between its parents, such as hand pollination in cucurbits or de-tasseling in corn.

Indeterminate - Plant habit where vine continues to grow.

M - Is a unit of measure that equals 1,000. Seed sold by seed count is priced in multiples of 1,000. For example 5M, 10M, 25M which stands for 5,000 seeds, 10,000 seeds and 25,000 seeds.

Monoecious - (cucumbers) Plant with both distinct male and female flowers.

Naked Seeded - No hull on the seed. Easier to eat than normal hulled seeds.

Open Pollination - Open pollination is pollination by insects, birds, wind, or other natural mechanisms. Seeds of open-pollinated plants will produce new generations of those plants; however, because the pollination is uncontrolled and the pollen source is unknown, open pollination may result in plants that vary widely in genetic traits.

Open Pollinated (OP) - A variety is said to be open pollinated when it is a non-hybrid variety, meaning that seed is produced via self-reproduction. Seed production of an open pollinated variety occurs using the plants natural pollination mechanism but in a controlled environment to prohibit the introduction of outside, unrelated pollen sources. These controls insure

that the open pollinated variety stays genetically pure and true to type.

Parthenocarpic - (cucumbers) Plants that set fruit without pollination.

Pelleted - Seed coating that improves the shape, size, and uniformity of raw seeds for more accurate sowing by hand and precision-sowing by machine. Pellets are made of inert materials which dissolve as they absorb moisture, allowing immediate access to oxygen for fast, uniform seedling emergence.

Pendant - Refers to how the pepper hangs on the plant.

Pithy - Fibrous, course texture.

Pungent - Refers to heat level of hot peppers; pungent = hot.

PVP - Plant Variety Protection. Seed may not be reproduced for sale without permission of the originator.

Sieve - Diameter of green bean pod.

Slip - This is a small crack that forms around the stem of melons. It is generally used as a harvest indicator. See the "Melon" section for a complete definition.

Transgenic - Genetically modified.

Uniform Ripening (UG) - Has the gene for uniform ripening of the fruit. Fruit are typically lighter green prior to ripening.

FREQUENTLY ASKED QUESTIONS

Do you offer any discounts that I would be eligible for?

Yes, we offer cash discounts on all seed orders over \$350.00. The cash discount is for orders paid for via check (*please write "US Funds" on check*). You may prepay your seed order at anytime and we will add that month's discount to your credit on account. The August discount is 10% and goes down a percentage each month through April. See page 130 for more details.

You offer more high quality varieties than most seed dealers. How do you decide which varieties to offer? And where do they all come from?

This edition of our catalog features over 1,000 varieties in over 43 vegetable crops. We consider most of these varieties as suitable for professional and commercial growers, while a few others are included because they're popular heritage varieties.

Deciding which varieties to offer is a challenging question and there are a number of factors that are considered, including:

- What market is a variety best suited for? For the shipper or fresh market? Or wholesale or retail trade?
- Does a new variety bring a game changing improvement over current varieties? Is it higher yielding? Does it produce more desirable, consistent or marketable fruit? Does produce from the variety offer any improvements in food quality or nutrition?
- Does the variety offer the grower any benefits in managing crop issues, weeds, insects or disease?

Many of these questions are answered in the product development trials we conduct every year on our farm. Our personal experience is important and our observations at the numerous vendor trials we visit also are a factor.

The reliability of the seed supplier is also important. Do they consistently have seed supply available? And is it high quality?

Our current vendor list is over 40 companies and includes:

American Takii, A.P. Whaley, Awald, Ball Horticulture Co, BHN, Bisek Gardens, Condor, Crookham, Croplan, De Ruiter, DP Seeds, Enza Zaden, Ernst Benary of America, Harris Moran, Harris Seeds, Hollar, Hybrid Seed Company, Illinois Foundation Seeds, Jersey Asparagus, Johnny's, Kimberly, Lark, PanAmerican Seed, Pure Line, Rispens, Rupp, Sakata, Schlessman, Seed Savers Exchange, Seeds By Design, SeedSense, Seedway, Seminis, Seneca Vegetable Research, SPS Idaho, Stokes, Sugar Hill, Syngenta, The Wax Company, Tozer, Treasure Valley Seed, US Agriseeds, US Seedless, Vilmorin, and Wild West.

I am preparing for a food safety audit. Can you help? Is Rupp Seeds GAP certified?

Yes, Rupp Seeds is GAP certified. A copy of the certificate can be found on page 127.

In recent years there have been several occurrences of food borne illness. These situations have prompted both the government and industry to respond to insure a safe food supply. Development of Good Agricultural Practices (GAP) and Good Handling Practices (GHP) for the produce industry help minimize these outbreaks, and voluntary audits help to insure the practices are defined and in use.

The U.S. Food and Drug Administration's "Guide to Minimize Microbial Food Safety Hazards for Fresh Fruits and Vegetables" doesn't have specific guidance for seed companies. Even so, we recognize that many of our customers need our assurance that seeds are handled appropriately to minimize contamination.

We've consulted with food safety experts to understand what we can do to assist our customers with their audit preparations. They've recommended that we provide a Letter of Guarantee that briefly describes our practices and they've assured us this letter is acceptable in any food safety audit. We've included the letter in this catalog for your convenience. See page 128 for a copy.

Are all of your seeds treated?

Most of our seed is treated. We do have some varieties available untreated. These items are marked as untreated in the pricing tables. See the pricing table example below. Walker Deluxe is available untreated and has a 'U' at the end of the item number and the item number is red instead of black. When ordering, please put a "U" behind the item number to signify you are ordering untreated seeds. In addition, it's helpful to put "Untreated Seeds Only" on the top of your order form.

What are GMOs? What does GMO stand for? And why do they exist?

A GMO, or Genetically Modified Organism, is a plant or variety that was developed to include a desired gene or selection of genes from another plant or organism.

GMOs were developed to enable a plant with a built-in ability to resist herbicides, insects and diseases, helping farmers produce more while reducing their use of chemicals. Recent developments in science are also improving the plants water and nitrogen utilization, which enable it to produce a crop even when these nutrients are in short supply.

My customers occasionally ask me if I raise and sell GMO vegetables. Can you tell me which products in your catalog are GMO?

GMO varieties of corn, soybeans and cotton have been widely accepted by farmers in the US and internationally. GMO developments in vegetable crops, on the other hand, have been pretty limited, in large part due to the high cost of research and development for crops that aren't widely grown. Currently, the only GMO vegetables available in our catalog are sweet corn and summer squash.

Of the roughly 107 varieties of sweet corn, 21 are GMO: the Performance Series, Attribute, Attribute Plus, and Attribute II varieties listed on pages 28 - 30.

Is there more information about GMOs that I can provide my customers if they are interested in learning more?

GMOAnswers.com is an excellent resource for anyone interested in learning more about GMOs. Visitors can ask questions and get answers from experts across a wide range of disciplines who will provide balanced, fact-based responses. These experts include conventional and organic farmers, agribusiness experts, scientists, academics, medical doctors and nutritionists from a wide range of studies.

Pricing table example. "U" indicates untreated seed.

KALE		M=1,000 seeds			
Price per 1,000 seeds (M)		1M	5M	25M	100M
28005	Black Magic	3.85	2.80	2.05	1.55
28504	Blue Ridge	10.45	9.40	8.65	8.15
28503	Winterbor	10.50	9.45	8.70	8.20
Priced per package		4 oz.			
Priced per pound in these package sizes			1#	5#	25#
28004U	Red Russian <small>Untreated</small>	15.25	33.85	33.35	33.10



BEANS

PLANTING

Plant green beans in soil temperatures of 65 degrees or greater. Planting depth should be ½" to 1". Row spacing should be 30" for hand-picking. There should be approximately 2" between plants. Some commercial growers are using 15" rows for late planted green beans that are going to be mechanically harvested.

See "Germination Chart" on page 125 for additional information on germination rate and days to germination at various soil temperatures.

MANAGEMENT

Weed pressure and insect pressure are the hardest things to control in green beans. If conditions are wet, diseases are more prevalent.

HARVEST

Harvest green beans when 50% of the beans are 3 - 4 sieve.

STORAGE

Store beans at 40 - 45°F and 95% humidity.

RUPP USE GUIDELINES

Home Garden and Farm Market varieties are considered to be high quality (gourmet) for fresh use or processing. They are low in fiber and more tender. As with most home garden varieties, pods set over a longer period for extended harvest.

Shipping varieties contain fiber that slows wrinkling under long distance shipping or longer time between picking and use on the stand. They are normally less tender than Home Garden or Farm Market varieties. Shipping varieties have a more concentrated pod set for mechanical harvest.

DISEASE CODES

A - Anthracnose
BBS - Bacterial Brown Spot
BV - Common Bean Mosaic Virus
CTV - Curly Top Virus
HB - Halo Blight
N# - Bean Mosaic Virus race number
NLB - Northern Leaf Blight
PM - Powdery Mildew
R - Rust
WM - White Mold

COLOR CODES

BY - Bright Yellow
DG - Dark Green
DY - Dark Yellow
GR - Green Red
LG - Light Green
MDG - Medium Dark Green
MG - Medium Green
MLG - Medium Light Green
P - Purple
VDG - Very Dark Green
Y - Yellow

BEAN SIEVE SIZE

1 sieve - 7/32"
2 sieve - 5/16"
3 sieve - 11/32"
4 sieve - 3/8"
5 sieve - 7/16"



WALKER DELUXE



BA0999



BRONCO



DESPERADO



JADE II ★

**ORDERS
OVER \$350
ARE SHIPPED
FREE!**



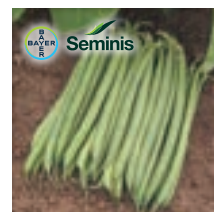
MOMENTUM



OUTLAW



SYBARIS ★



VALENTINO

ASPARAGUS	
Features	
13007	Walker Deluxe ^{F1} <i>Tight headed spears with slightly purple bracts. Impressive yields. High disease tolerance. Used for fresh market and processing.</i>

ASPARAGUS		M=1,000 seeds				
Priced per package		100 Seeds	500 Seeds			
Price per 1,000 seeds (M)				1M	5M	15M
13007U	Walker Deluxe untreated	14.40	59.95	104.20	90.60	78.75

BEANS		BUSH GREEN Fresh Market						
▲		Days	Pod Length	Pod Color	Seed Color	Use	Disease	Features
07147	BA0999	50	5 ½"	DG	White	FM, S	BBS, N	Early bean has a pod that develops very quickly at maturity. Sieve size distribution is 65% in the 3-4 range and 35% in the 5's. This bean will work really well as a rain gap filler.
07043	Bronco	58	5 ½"	DG	White	FM, S	BV ¹	High yielding. For market or shipping.
07033	Desperado	53	5 ½"	DG	White	FM, S	BV	Desperado is a robust variety that produces high yields of high-quality straight pods, quick to mature. Well adapted for heat and stress tolerance with strong consumer appeal.
★ 07155	Jade II	60	6 ½"	DG	White	FM, S	BV, CTV, R	Improvement to Jade - darker beans and better seed quality. Long, straight pods which grow in a less concentrated set.
07005	Momentum	56	5 ¾"	DG	White	FM, S	BV	An upright bush style variety. Produces a concentrated set of straight pods with outstanding yields and is widely adapted to most growing regions.
07024	Outlaw	57	5 ¼"	DG	White	FM, S	BV	Extremely straight, glossy pods that resist breaking and bruising. Plant does not lodge. Versatile across all growing regions. Excellent seed quality and germination. Use as a Prevail replacement.
★ 07148	Sybaris	55	5 ½"	VDG	White	FM, S	BV, R	Sets shiny, high quality fruit even in plant's upper region.
07130	Valentino	56	5 ½"	DG	White	S	BV, R	A shipper variety that has performed very well in trials. It is similar to Bronco in maturity with darker colored pods.

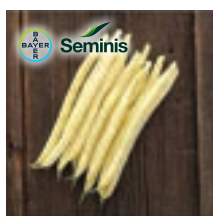
BEANS BUSH GREEN Fresh Market		M=1,000 seeds				
Price per 1,000 seeds (M)		2M	10M	20M	80M	800M*
07147	BA0999 Cruiser	4.60	4.35	4.15	3.90	3.70
07043	Bronco Cruiser	5.00	4.00	3.75	3.55	3.30
07033	Desperado Cruiser	5.35	4.35	4.10	3.90	3.65
07155	Jade II Cruiser	4.15	3.90	3.70	3.45	

BEANS BUSH GREEN Fresh Market		M=1,000 seeds				
Price per 1,000 seeds (M)		2M	10M	20M	80M	800M*
07005	Momentum Cruiser	5.45	4.45	4.20	4.00	3.75
07024	Outlaw Cruiser	5.30	4.30	4.05	3.85	3.60
07148	Sybaris Cruiser	5.45	4.45	4.20	4.00	3.75
07130	Valentino Cruiser	4.15	3.90	3.70	3.45	

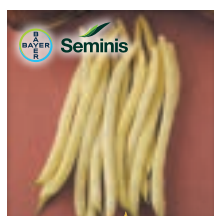
* Multiple packages may be used to fill orders for these quantities.



JADE ★



SUNBURST



SV1003GF ★



BORSALINO

BEANS		BUSH GREEN Heritage Varieties - Home Garden					
▲		Days	Pod Length	Pod Color	Seed Color	Disease	Features
★	07135 Jade	60	6 - 7"	DG	White	BV, CTV, R	Large, upright plants keep beans clean and straight. Heat tolerant and high yielding even when stressed by heat or cold.
	07026 Strike	55	5"	MG	White	BV ¹	A high yielding fresh market variety.

BEANS		BUSH GREEN FLAT						
▲		Days	Pod Length	Pod Color	Seed Color	Use	Disease	Features
Fresh Market								
07017	Roma II	58	5 ½"	MG	White	FM, HG	BV ¹ , N ¹⁵	Good flavored Romano type for home or market.

BEANS		YELLOW WAX						
▲		Days	Pod Length	Pod Shape	Pod Color	Seed Color	Disease	Features
Fresh Market								
08019	Sunburst 	50	6"	Round	BY	White	BV, HB	A Seminis variety for local market or shipping. Long straight pods that are an attractive bright yellow. Concentrated set.
 08005	SV1003GF 	56	5 ¼"	Round	Y	White	BBS, BV	Has better color and a slightly longer pod than Gold Dust with a more upright plant. Consistent yielder.

BEANS		FRENCH FILET						
▲		Days	Pod Length	Diameter	Pod Color	Seed Color	Disease	Features
08018	Borsalino <small>Baby Wax</small>	60	4"	¼"	Y	White	A, BV	<i>A Vilmorin high quality baby wax bean with a deep gold color and a concentrated set for both hand or mechanical harvest. Sieve size 2 & 3.</i>

BEANS BUSH GREEN Heritage					
Priced per pound in these package sizes					
	1#	5#	25#	50#*	500#*
07135 Jade	8.00	7.00	6.75	6.60	6.45
07026U Strike <small>Untreated</small>	5.75	4.75	4.50	4.35	4.20

* Multiple packages may be used to fill orders for these quantities.

BEANS BUSH GREEN FLAT				
Priced per pound in these package sizes				
	1#	5#	25#	50#
07017U Roma II <small>Untreated</small>	5.45	4.45	4.15	3.95

BEANS YELLOW WAX						M=1,000 seeds
Price per 1,000 seeds (M)						
	2M	10M	20M	80M	800M*	
08019 Sunburst <small>Cruiser</small>	5.55	4.55	4.30	4.10	3.85	
08005 SV1003GF <small>Cruiser</small>	5.60	4.60	4.35	4.15	3.90	

* Multiple packages may be used to fill orders for these quantities.

BEANS FRENCH FILET					M=1,000 seeds
Price per 1,000 seeds (M)					
	2M	10M	20M	100M	
08018 Borsalino	6.30	5.55	5.30	5.05	

GROWER PREFERRED ALL-STARS ★ BEANS

Items marked with a gold star are "Grower Preferred All-Stars". Growers throughout the Midwest and North East have been successful with these varieties. If you're looking to get started with a new crop or make a change in the varieties you are using, you can trust that Grower Preferred products will do the job.

BEANS BUSH GREEN

If you are looking for a hand-pick bean with very long pods, **Jade** is the one for you. Jade has been a standard variety for some time and will provide good yields in all weather conditions.

Jade II is a newer version of Jade that has the same qualities you have come to expect from the original but with slightly darker and straight pods.

Sybaris is a green bean that has performed admirably over the past several seasons. This variety has proven itself to be one of the highest quality green beans on the market! The pods are a shiny, dark green color and the sieve size

remains in the 3's and 4's. It will also hold longer in the field to give growers more flexibility at harvest time.

BEANS YELLOW

SV1003GF is a newer wax bean that delivers the same yields as Sunburst with a slightly darker yellow pod. It is quickly becoming a favorite of wax bean growers who are also looking for longer pod length. SV1003GF averages around 5 ½" in length.

BEANS GREEN RUNNER

Volunteer Half Runner is a favorite for growers planting half runner beans. It has very long 6" pods that sets a lot of beans!

Dave Silveus
Vegetable Consultant



BEANS		GREEN RUNNER						
		Days	Pod Length	Pod Shape	Pod Color	Seed Color	Disease	Features
★	07118 Volunteer Half Runner	60	6"	Oval	LG	White	BV, R	A strain of Half Runner developed by the USDA breeder, Dr. Mullins, at the University of Tennessee. The commercial favorite.

BEANS		HORTICULTURAL Heritage Varieties						
		Days	Pod Length	Pod Shape	Pod Color	Seed Color	Use	Features
	07031 French Horticultural	68	7"	Flat	GR	Buff Red	FM, HG	This strain produces runners though seldom staked. Young beans are frozen; mature are shelled green or dried.

BEANS GREEN RUNNER		Priced per pound in these package sizes			
		1#	5#	25#	50#
07118	Volunteer Half Runner	6.00	5.00	4.70	4.50

BEANS HORTICULTURAL		Priced per pound in these package sizes			
		1#	5#	25#	50#
07031U	French Horticultural Untreated	7.30	6.30	6.00	5.80



RED ACE pg. 11

BEETS

PLANTING

Plant seed 1" apart and thin to 2" apart. Row spacing ranges from 15" - 24". Seed depth should be ¼" - ½" deep. Poor stands are often the result of planting too deeply or the soil's crusting after a heavy rain. The seedlings may emerge over a relatively long period of time, making a stand of different sizes and ages of seedlings.

See "Germination Chart" on page 125 for additional information on germination rate and days to germination at various soil temperatures.

MANAGEMENT

It is extremely important to thin beets because they are a multigerm seed meaning each seed will produce several plants. Beets that are thinned when they reach approximately 3" tall can be used as greens. Frequent and shallow cultivation is important to keep the soil loose around the growing beet to ensure uniform roots.

HARVEST

Beets can be harvested whenever they grow to the desired size. About 60 days are required for beets to reach 1½" in diameter, the size often used for cooking, pickling or canning.

STORAGE

Beets may be stored in a polyethylene bag in a refrigerator for several weeks. Cut off the tops of the beets one inch above the roots. Beets store the best at 32°F and 95% humidity. Do not freeze.



CAMARO



CHIOGGIA
GUARDSMARK



RED ACE



TOUCHSTONE
GOLD

Naturall

Enhance root growth and increase seedling vigor for healthier plants and higher yields with Naturall™ for Vegetables.
See page 123 for rates and pricing.

BEETS				
		Days	Sugar	Features
Fresh Market				
14003	Camaro ^{F1}	50 - 55	15%	Good root quality, uniform size and shape. High marketable yield. Smooth skin, good internal and external color.
14105	Chioggia Guardsmark	60	12-15%	Candy-striped beet with alternating rings of dark red and white that are unique and beautiful, making this variety a popular choice for specialty markets. Increased uniformity and bolt tolerance. A strain of the popular Italian heirloom.
14011	Merlin ^{F1}	63	12 - 15%	A beet that replaces Pacemaker III with very similar qualities but more producible seed.
14002	Red Ace ^{F1}	53	12 - 15%	Early, sweet, red and resists zoning in hot weather. Excellent for garden, market or processing.
14106	Touchstone Gold	55	12-15%	Offers higher germination rates, more uniform round roots and less zoning than standard golden types. Solid green tops are long, attractive, and quickly shade out weeds. Vibrant golden yellow flesh retains its color when cooked and is sweet and more mild than red beets.
Heritage Varieties				
14104	Cylindra	60	5 - 7%	Unique, long cylindrical shaped beet, excellent for slicing. Up to 8" long and 1 3/4" in diameter.
14101	Detroit Dark Red	58	5 - 7%	A very popular, tender, dark red beet used by many home gardeners.

BEETS		M=1,000 seeds			
	Price per 1,000 seeds (M)	5M	25M	250M	1,000M
14003 Camaro		1.40	1.31	1.25	1.21
14105 Chioggia Guardsmark ^{F300}		1.67	1.58	1.52	1.48
14011 Merlin ^{F300}		1.27	1.18	1.12	1.08
14002 Red Ace ^{F300}		1.27	1.18	1.12	1.08
14106 Touchstone Gold ^{F300}		2.87	2.78	2.72	2.68

Seed Size: 9 - 10 = 30,000 seeds per pound.

BEETS		Priced per package			
		1 oz.	4 oz.		
		Priced per pound in these package sizes			
		1#	5#	50#	
14104U	Cylindra ^{Untreated}	4.45	11.80	11.55	11.30
14101U	Detroit Dark Red ^{Untreated}	4.45	11.80	11.55	11.30



EMERALD CROWN ★ pg. 13

BROCCOLI

PLANTING

For spring broccoli, plant in greenhouse in flats. Sow $\frac{1}{4}$ " to $\frac{1}{2}$ " deep. For fresh market broccoli, plant on 30" beds with trickle irrigation. On a 30" bed, plant two rows of broccoli. Plants should be 15" apart. When planting fall broccoli, count backward from the first fall frost in your area and add about 30 days from planting. This can be either started in a greenhouse or direct seeded into the field.

See "Germination Chart" on page 125 for additional information on germination rate and days to germination at various soil temperatures.

MANAGEMENT

Use starter fertilizer for transplants and side-dress with nitrogen fertilizer when the plants are half grown. Provide ample soil moisture, especially as the heads develop. Scout fields for aphids and cabbage worms.

HARVEST

Harvest when the head is large and firm, with a compact cluster of small flower buds. The buds should not have bright yellow flowers showing. Look for bright green or purplish-green heads. Yellow flowers and enlarged buds are signs of over-maturity.

STORAGE

Store the broccoli, unwashed, in loose or perforated plastic bags in the vegetable crisper of the refrigerator. Broccoli left unrefrigerated quickly becomes fibrous and woody.

Wet broccoli quickly becomes limp and moldy in the refrigerator—so wash it just before using. Store fresh broccoli in the refrigerator for 3 - 5 days. Old broccoli may look fine, but it develops strong undesirable flavors. It tastes best and is highest in nutritional value when storage time is brief.

DISEASE CODES

BS - Black Speck
BR - Black Rot
DM - Downy Mildew
HS - Hollow Stem
PB - Club Root



EASTERN CROWN



GREEN MAGIC ★



HANCOCK



IMPERIAL ★



MILLENNIUM ★



SORRENTO

BROCCOLI							
		Days from Transplant***	Sowing Season	Head Size	Bead Size	Disease Code	Features
<i>Fresh Market</i>							
15009	Eastern Crown ^{F1}	74	Spring Summer	Medium	Small		<i>Eastern Crown is an outstanding variety for the East Coast. Small beads, blue-green head color and excellent heat tolerance. Perfect for the crown cut/short trim market (Asian cut). Performs well in long day length and moderate heat.</i>
★ 15051	Emerald Crown ^{F1}	78**	Spring	Medium	Medium Small	DM	<i>A Sakata variety specifically bred for high quality and high yield crown cuts. Very uniform, tight heads with beads that are blue green. Nice compliment to Green Magic.</i>
★ 15044	Green Magic ^{F1}	75	Spring	Medium	Medium Small	DM	<i>This summer type broccoli offers very good uniformity and holding ability. It is in the mid-early maturity class and has a wide adaptability. Has a semi-dome, tight head, with medium-small bead size and good plant habit.</i>
15001	Hancock ^{F1}	85	Spring Summer	Medium	Small		<i>A Seminis variety with raised heads for easier picking ability. Thin-stalked variety used for either crown cut or bunching use. Very good heat tolerance.</i>
★ 15049	Imperial ^{F1}	85*, **	Spring	Medium	Small	DM	<i>A Sakata variety that performs best during long day conditions. Good heat tolerance. Tight head with small, dark green beads.</i>
★ 15004	Millennium ^{F1}	88	Spring, Summer	Large	Extra Small		<i>A highly adaptable, crown cut type, yielding high-domed heads with very small beads and exceptionally uniform head maturity. It has a round shape, good heat tolerance and less side shoots. Is anthocyanin-free and has shown strong post-harvest color retention.</i>
15509	Sorrento ^{Broccoli Raab}	70	Spring, Fall	Large Florets			<i>Sorrento is a fast-growing, early maturing variety. Uniform large florets with blue-green narrow turnip-shape leaves. Tall upright plant, slow to bolt. A perfect variety for fresh market or home gardeners.</i>
* Day length sensitive, earlier maturity when day length is longer. ** Requires warmer night time temperatures to mature, growth rate dramatically slows down under cold temperatures. *** Add 15-20 days for direct seeding.							

BROCCOLI		M=1,000 seeds				
Price per 1,000 seeds (M)		1M	5M	25M	100M	500M*
15009	Eastern Crown	11.10	10.50	10.15	9.75	9.55
15051	Emerald Crown	10.15	9.55	9.20	8.80	8.60
15044	Green Magic	8.85	8.25	7.90	7.50	7.30
15001	Hancock	9.15	8.55	8.20	7.80	7.60
15049	Imperial	9.50	8.90	8.55	8.15	7.95
15004	Millennium	10.55	9.95	9.60	9.20	9.00
Priced per package		1 oz.	4 oz.			
Priced per pound in these package sizes					1#	
15509	Sorrento <small>Broccoli Raab</small>	12.05	19.25	57.75		
* Multiple packages may be used to fill orders for these quantities.						

ALL-STARS ★ BROCCOLI

Emerald Crown is a perfect fit for 2nd pick spring and works for early fall harvest as well.

Green Magic is a great variety for early spring sowing.

Imperial has great heat tolerance and fits in the summer harvest slot.

Millennium is ideal for harvest in the fall to late fall time period.

Jeff Hess
Vegetable Consultant



CHURCHILL pg. 15

BRUSSELS SPROUTS

PLANTING

Start in the greenhouse and transplant in early to mid summer, when one would start long season cabbage. Seeds should be planted 4 - 5 weeks before transplanting. Allow 90 - 100 days for plants to mature. For summer harvest, you must plant transplants of an early, heat-resistant variety in very early spring. Sprouts maturing in hot weather or under dry conditions are more likely to develop bitterness. Fall production is the most desirable in a large portion of the country. Plant 24" - 36" apart in the row and 30" - 36" apart in rows.

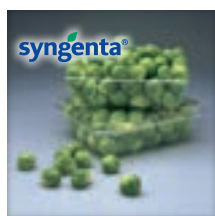
See "Germination Chart" on page 125 for additional information on germination rate and days to germination at various soil temperatures.

MANAGEMENT

Brussels are grown much like cole crops, cabbage and broccoli.

HARVEST

Harvest sprouts when buds form heads one to two inches in diameter. Pick sprouts when they are firm. Lower sprouts mature first.



CAPITOLA



CHURCHILL



RED BALL



SAVE WITH CASH DISCOUNTS

Cash discounts are available throughout the season and are a great way to add money to your bottom line.

See page 130 for all of the details.

November	7%
December.	6%
January	5%
February	4%
March	3%
April	2%

BRUSSELS SPROUTS

		Days	Sprout Size	Plant Size	Features
<i>Fresh Market</i>					
16006	Capitola ^{F1}	90	1 ½"	38"	Known for uniform, high quality sprouts. Adaptable, being well suited to fresh market and processing. It is harvestable either by hand or machine. Produces heavy yields.
16007	Churchill ^{F1}	80	1 - 1 ¼"	30"	A first early variety, maturing late August to October. Produces good yields of tight, evenly spaced buttons with superb flavor.
16002	Jade Cross Regular ^{F1}	85	¾ - 1"	28"	Popular early maturing variety. Deep green sprouts are spaced closely on medium sized plants. High yield of firm, oval-shaped, medium sized sprouts. Holds well in adverse weather.
16502	Red Ball	100	1"	38"	Specialty variety producing red sprouts which improve in color after cold weather. Best red variety available.

BRUSSELS SPROUTS

M=1,000 seeds

Price per 1,000 seeds (M)	1M	5M	25M	100M
16006 Capitola	27.30	26.65	26.35	25.90
16007 Churchill	14.95	14.30	14.00	13.55
16002 Jade Cross Regular	10.05	9.40	9.10	8.65
16502 Red Ball	5.95	5.30	5.00	4.55

Biological Enhancement for Vegetables

Naturall[™]

for Vegetables

ROOT INOCULANT

Naturall[™] for Vegetables contains proprietary and patent pending biologicals that colonize the root system of plants. Crop stress such as disease and dry weather can be alleviated, and often systemically, so that root colonization by this treatment can affect the physiology of the whole plant resulting in higher yields.



Enhanced root growth
Healthier plants
Increased seedling vigor
Easy to apply
Higher yields
Improved nutrient and water efficiency



ABM | abm1st.com

For details and pricing on Naturall, see page 123.



GRAND VANTAGE ★ pg. 17

CABBAGE

PLANTING

Transplant early cabbage soon enough that it matures before the heat of summer. Planting two or three varieties with different maturities can provide harvest over a longer period of time. Late cabbage must be started during the heat of mid-summer, but it develops its main head during the cooling weather of fall. It may be transplanted or direct seeded. Plants should be planted 12" - 24" apart depending on variety and the desired head size. Sow cabbage seeds ¼" - ½" deep.

See "Germination Chart" on page 125 for additional information on germination rate and days to germination at various soil temperatures.

MANAGEMENT

Use starter fertilizer when transplanting and side-dress with nitrogen after plants are half grown. Keep plants out of intense sunlight and heat of summer. Common problems are Yellow or Fusarium Wilt, as well as cabbage worms.

HARVEST

Cabbage can be harvested anytime after the head has formed. For highest yield, cut the cabbage heads when they are solid (firm to hand pressure) but before they crack or split. When heads are mature, a rain may cause heads to crack or split.

STORAGE

Fresh, uncut heads of cabbage can be stored in the refrigerator for up to two weeks. Cover loosely with a plastic bag or use perforated bags. Do not wash cabbage before storing; the extra moisture will hasten deterioration.

DISEASE CODES

ALS - Angular Leaf Spot
ALT - Alternaria Leaf Spot
BR - Black Rot
BS - Black Spec
CR - Crown Rot
DM - Downy Mildew
T - Thrips
TB - Tip Burn
YR - Yellows Resistant



FAST VANTAGE ★



XTREME VANTAGE



GRAND VANTAGE ★



STELLAR VANTAGE ★



CABBAGE		HYBRID					
		Days from Transplant*	Head Weight pounds	Head Type	Color	Disease Code	Features
★	17069 Fast Vantage	50	2 ½	Round	Medium Green		A very uniform hybrid that is slightly earlier than Headstart for the early cool season.
	17005 Stonehead	60	3 - 4	Round	Gray Green	TB	A popular, early hybrid for home garden or market. Solid, slow to burst heads.
	17097 Platinum Dynasty	70	3 - 4	Round	Blue Green	BR, TB, YR	A Seminis fresh market hybrid with excellent uniformity in the early main season time slot. Performs well in the East & Midwest both in the summer and fall.
	17048 Cheers	80	4 - 6	Round	Blue Green	BR, YR	A hybrid with uniform heads, larger wrapper leaves. Disease resistant. Compare to Blue Vantage.
	17011 Xtreme Vantage	80	5 - 6	Round	Blue Green	BR, TB, YR	Very good uniformity in field. Has a good disease package.
★	17116 Grand Vantage	85	5 - 6	Round	Blue Green	TB, YR ¹	An exciting fresh market variety with attractive green to blue-green color. Very round head 7 x 7", heavy weight, dense solid interior and short core. Tight wrapper leaves. Good holding ability and excellent yield.
★	17009 Stellar Vantage	85	5	Round	Blue Green	BR, YR ¹	Mid-late maturity with compact heads and short cores. Offers nice, dense heads and has good field-holding ability.

* Add 10-15 days for direct seeding.

ALL-STARS ★ CABBAGE

Fast Vantage Look no further for your early cool season planting.

Grand Vantage is a great all around main season cabbage. Very good producer.

Stellar Vantage A later season variety which holds in the field very well.

Jeff Hess
Vegetable Consultant



CABBAGE Hybrid

M=1,000 seeds

	Price per 1,000 seeds (M)	1M	5M	25M	100M	500M*
17048 Cheers	7.25	6.65	6.05	5.45	5.35	
17069 Fast Vantage	7.40	6.80	6.20	5.60	5.50	
17116 Grand Vantage	8.85	8.25	7.65	7.05	6.95	
17097 Platinum Dynasty	7.45	6.85	6.25	5.65	5.55	
17009 Stellar Vantage	6.90	6.30	5.70	5.10	5.00	
17005 Stonehead	6.75	6.15	5.55	4.95	4.85	
17011 Xtreme Vantage	6.25	5.65	5.05	4.45	4.35	

* Multiple packages may be used to fill orders for these quantities.



RED DYNASTY



TOY CHOY

VEGETABLE ROOT INOCULANT
Naturall™ for Vegetables contains proprietary and patent pending biologicals that colonize the root system of plants. Crop stress such as disease and dry weather can be alleviated, and often systemically, so that root colonization by this treatment can affect the physiology of the whole plant resulting in higher yields. **See page 123 for application rates and pricing.**

CABBAGE		SPECIALTY Hybrid				
		Days from Transplant*	Head Weight pounds	Head Type	Color	Disease Code Features
17090	Red Dynasty	72	3 ½ - 5	Flat Round	Red	BR, TB <i>A Seminis red cabbage with the right size for fresh market plus intermediate black rot resistance.</i>
17070	Red Jewel	75	3 - 5	Round	Purple Red	TB <i>Sakata hybrid that is widely adaptable with very good holding ability. Excellent uniformity and yield potential.</i>

* Add 10-15 days for direct seeding.

CABBAGE		CHINESE				
		Days from Transplant*	Head Weight pounds	Head Type	Color	Disease Code Features
<i>Fresh Market</i>						
18010	Blues ^{F1}	57	4 - 5	Napa	Green	ALS, BS, DM <i>CROP FAILURE Extra slow bolting, high disease tolerance, superior performance in spring or early fall.</i>
18017	Yuki ^{F1}	67	4 - 5	Napa	Green	BS, CR, TB <i>Yuki is a medium maturing, China Pride type hybrid. Good uniformity and size.</i>

* Add 10-15 days for direct seeding.

CABBAGE		CHINESE Pak-Choi			
		Days	Head Type	Color	Features
49013	Toy Choy ^{F1}	30 - 35	Celery	White	<i>A compact hybrid Cantonese Pak Choi with thick, broad, milky white petioles and glossy, dark green leaves. Perfect for growers servicing Asian markets.</i>

CABBAGE SPECIALTY Hybrid		M=1,000 seeds				
Price per 1,000 seeds (M)		1M	5M	25M	100M	500M
17090	Red Dynasty	10.85	10.25	9.65	9.05	8.95
17070	Red Jewel	10.25	9.65	9.05	8.45	8.35

CABBAGE CHINESE Pak-Choi		M=1,000 seeds			
Price per 1,000 seeds (M)		1M	5M	25M	100M
49013	Toy Choy	3.95	3.35	3.05	2.45

CABBAGE CHINESE		M=1,000 seeds			
Price per 1,000 seeds (M)		1M	5M	25M	100M
18010	Blues	Crop Failure			
18017	Yuki	5.50	4.90	4.60	4.00



ONLINE VEGETABLE PRODUCTION RESOURCES

www.ruppseeds.com/MVPG

Purdue University's "Midwest Vegetable Production Guide for Commercial Growers" which includes spacing, fertilizing and harvesting information, as well as information on diseases, pest management and weed control.



www.ruppseeds.com/OSUVeg

The Ohio State University Extension Vegetable Crops website with research reports on many crops. The site also includes a listing of vegetable team members by expertise and how to contact them.



www.ruppseeds.com/MAVR

The 2022/ 2023 edition of the Mid-Atlantic Commercial Vegetable Production Recommendations.



www.ruppseeds.com/MSUipm

Michigan State University's guide for Integrated Pest Management in commercial vegetable production.



www.ruppseeds.com/PSUsoil

Penn State University offers soil test recommendations for commercial vegetables.



www.ruppseeds.com/NCShort

North Carolina State University's Department of Horticulture Science website.



www.ruppseeds.com/uoiVeg

University of Illinois Extension Vegetable Gardening Basics.



www.ruppseeds.com/PSUext

Penn State University's Department of Plant Pathology, Vegetable Disease Identification.

**A****B****C****E****G****H****K****L****M****O****P****R****S****T****W**



VIPER pg. 21

CARROTS

When deciding what variety of carrot to plant one must determine two things: "What is my target audience?" and "What kind of soil do I have?" Growers need to define if they are selling to fresh or storage markets. Most of the carrots available from Rupp are geared towards fresh market. If high tunnels or cold frames are used in your operation, you may want to consider carrots as part of your rotation due to their ability to resist cold weather.

There are five main types of carrots: Nantes, Chantenay, Baby, Imperator, and Danvers.

- Nantes are easily and widely adapted; straight cylindrical roots ranging 5" - 7" long. They tend to have a sweet flavor and crisp texture, but have a limited storage potential. Nantes are grown in loose sandy soils or in raised beds.
- Chantenay have conical roots with broad shoulders and rounded tips. They have a rich, sweet flavor and also possess a good storage potential. They are an excellent type to grow from summer to fall and are adapted to various soil types. They usually size up well in clay soils with high organic matter content.

- Baby carrots have a root less than 5" long with a crisp texture and are frequently quite sweet when mature. They also are grown in any well drained soil and can be used to separate different types of salad greens. They tend to have limited storage potential.
- Imperator are long with a tapered root shape, stocky shoulders and strong tops. They tend to have a fibrous texture and store well. This type of carrot sizes up best in deep, sandy loam.
- Danvers have a thick rooted cylindrical shape with a yellowish core. This type is mainly used for processing, juicing, and storage.

PLANTING

Carrots can be planted in soils as cool as 40°F with the ideal temperature ranging from 50 to 75°F. They take anywhere from 7 - 21 days to emerge from the soil depending on soil temperatures. Spring carrots are planted 2 - 3 weeks before the last frost. For fall harvest, plant carrots 10 - 12 weeks before the first frost. Seed carrots ¼" - ½" deep and 15" between rows. Using seed tapes or pelleted seed will help prevent over seeding.

See "Germination Chart" on page 125 for additional information on germination rate and

days to germination at various soil temperatures.

MANAGEMENT

Soil nutrients are very important. Test the soil to check for optimal levels. Also scout for insect and fungal infestations. Root quality is best when soil temperatures are 60 - 70°F. The shape of the root is determined within the first few weeks after germination when the new plant extends its taproot deep into the soil. Sometimes growers will mix radish seed with carrot seed to help with emergence. Radishes tend to have the ability to break through soil crusting which in turn helps the carrots emerge.

HARVEST

Fresh market carrots are harvested when they are ¾" - 1½" in diameter.

STORAGE

Store carrots at 32 - 34°F and at 98 - 100% humidity. Store clean carrots away from other fruits and vegetables.



BOLERO



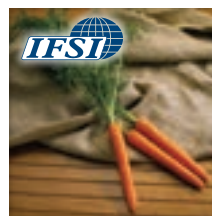
ENTERPRISE



GOLD NUGGET



MUSICO



OLYMPUS

CARROTS		Hybrid				
▲		Maturity	Size	Type	Interior	Features
19032	Bolero	Early	8"	Nantes	Orange	<i>Bolero is a proven variety year in and year out as a versatile nantes suited for bunching, slicing and baby nantes markets.</i>
19026	Enterprise	Early Main	12 - 14"	Imperator	Dark Orange	<i>A Seminis fresh processing cut and peel or slicing carrot with long, smooth, dark orange roots with a small core. Resists cracking. Strong top with good leaf blight tolerance.</i>
19014	Gold Nugget	Medium Early	7.5 - 8"	Nantes	Yellow	<i>Sweet flavor. Very uniform with high production. Medium vigor. Erected with a strong top and good aptitude for harvesting by top lifting.</i>
19006	Musico	Early	7 - 8"	Nantes	Dark Orange	<i>A uniform, cylindrical root with well-rounded tips at maturity. Strong attachment for harvest by lifting or bunching. Very good internal quality. A good replacement for Primo.</i>
19007	Olympus	Main	7 - 9"	Imperator	Dark Orange	<i>Outstanding for bunching. Great color combined with a smooth finish. Very crisp texture and excellent flavor. Classy hybrid with high yield potential.</i>
19009	Viper	Main	12 - 14"	Imperator / Cut & Peel	Bright Orange	<i>Was bred for higher density plant populations and maintains its long length to maximize yield for two inch pieces. Small, indistinctive core and incredible top strength with good stem attachment for easy harvesting. A Sakata variety that combines a great flavor profile and very crisp texture.</i>

CARROTS		OP				
▲		Maturity	Size	Type	Interior	Features
19505	Little Finger	Early	3 - 4"	Baby	Bright Orange	<i>Used for baby carrots.</i>

CARROTS Hybrid		M=1,000 seeds			
Price per 1,000 seeds (M)		10M	100M	1,000M	5,000M
19032	Bolero	1.61	1.26	1.21	1.18
19026	Enterprise	1.09	0.74	0.69	0.66
19014	Gold Nugget	1.55	1.20	1.15	1.12
19006P	Musico <small>Pelleted</small>	1.64	1.29	1.24	1.21
19007	Olympus	1.06	0.71	0.66	0.63
19009	Viper	1.11	0.76	0.71	0.68

CARROTS OP		Pricing			
		Priced per package		Priced per pound in these package sizes	
		1 oz.	4 oz.	1#	5#
19505U	Little Finger <small>Untreated</small>	5.50	8.80	23.10	22.60



TWISTER pg. 23

CAULIFLOWER

PLANTING

Cauliflower is best started from transplants for both spring and fall crops. Do not transplant sooner than 2 - 3 weeks before the average frost free date in the spring. Cauliflower is more sensitive to the cold than its cabbage-family relatives. It is important to start cauliflower early enough that it matures before the heat of the summer, but not so early that it will be injured by the cold. Transplant autumn cauliflower and cabbage at the same time. Use starter fertilizer when transplanting. Start the transplants so that they grow actively until transplanting and never cease growth. Space transplants 18 - 24" apart in the row. Use wider spacing for fall plantings.

See "Germination Chart" on page 125 for additional information on germination rate and days to germination at various soil temperatures.

MANAGEMENT

Cauliflower plants should be kept growing vigorously from the seedling stage through harvest. When the heads begin to form (shows 2 to 3" of white curd at the growing point), it is ready to blanch. Tie the outer leaves together over the center of the plant to protect the head from sunburn, to keep it from turning green and developing an off-flavor. When selecting cauliflower choose varieties that are self wrapping. This will help in the blanching process.

HARVEST

The curd develops rapidly under proper growing conditions. It grows 6 - 8" in diameter and is ready to harvest within 7 - 12 days after blanching begins. The mature heads should be compact, firm, and white. Harvest the heads by cutting the main stem. Leave a few green outer leaves attached to protect the heads. Cut the heads before they become over mature and develop a coarse "ricey" appearance. Once individual florets can be seen, quality deteriorates rapidly.



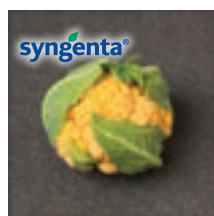
MINUTEMAN ★



DEPURPLE



SYNERGY ★



FLAME STAR



SHAKARIS ★



CHEDDAR

CAULIFLOWER							
		Days from Transplant	Head Type	Plant Size	Self Wrapping	Sowing Season	Features
★	20015 Minuteman ^{F1}	60	Deep Dome	Medium	Good	Spring	An early and widely adapted hybrid from Seminis that has performed well when harvested in the summer heat and early fall. Superior head quality.
	20013 DePurple ^{F1}	68	Domed	Medium, Erect	Very Good	Spring, Summer	Lavender/pink variety that offers uniform maturity and consistent performance under a variety of environmental conditions. Ideal for the specialty color market.
	20020 Freedom ^{F1}	70	Domed	Large	Excellent	Spring Summer	A mid season hybrid from Seminis with more uniformity for harvest.
★	20009 Synergy ^{F1}	75 - 80	Domed	Medium	Excellent	Spring	An Enza variety especially suited for summer production. Will give good covering for nice white curds in the heat.
	20003 Twister ^{F1}	75 - 80	Domed	Medium	Excellent	Spring, Summer	Twister is a tight, heavy-headed, white cauliflower with good internal wrap. It is mid-maturing with very uniform harvest. Twister seems to prefer heavier ground.
	20014 Flame Star ^{F1}	80	Semi Dome	Medium, Erect	Good	Spring, Summer	Beautiful semi-orange variety targeted to the specialty color market. Produces medium-size plant with high yields of smooth, dense, well-shaped heads. Versatile for fresh market or processing markets.
★	20006 Shakaris ^{F1}	80 - 85	Domed	Compact	Very Good	Spring Summer	Great for fresh market and processing. Consistent head size with abundant yield potential. Notable white curd.
	20021 Cheddar ^{F1}	85 - 90	Domed	Medium	Poor	Summer Only	A Seminis orange cauliflower that holds well in the field. Brighter when lightly cooked. A market attention getter.
	20025 Graffiti ^{F1}	85 - 90	Domed	Medium, Erect	Fair	Spring Summer	CROP FAILURE A unique deep purple hybrid from Syngenta which needs sunlight to obtain full color. Works well raw or steamed - add a small amount of lemon juice when cooking to retain the color.

CAULIFLOWER		M=1,000 seeds				
Priced per package		250 Seeds				
Price per 1,000 seeds (M)		1M	5M	25M	100M	500M*
20021 Cheddar	25.55	78.60	77.60	76.60	75.60	75.35
20013 DePurple	30.30	93.10	92.10	91.10	90.10	89.85
20014 Flame Star	30.30	93.10	92.10	91.10	90.10	89.85
20020 Freedom	12.25	37.60	36.60	35.60	34.60	34.35
20025 Graffiti	Crop Failure					
20015 Minuteman	18.05	17.40	16.95	16.50	16.40	
20006 Shakaris	19.75	19.10	18.65	18.20	18.10	
20009 Synergy	19.25	18.60	18.15	17.70	17.60	
20003 Twister	16.90	16.25	15.80	15.35	15.25	

* Multiple packages may be used to fill orders for these quantities.

ALL-STARS ★ CAULIFLOWER

Minuteman A very nice, early variety that's perfect for summer harvest.

Synergy handles the heat very well for late summer harvest.

Shakaris is perfect for fall harvest and is also a fantastic self-wrapper.

Jeff Hess
Vegetable Consultant





CASH DISCOUNTS

Cash discounts are available throughout the season and are a great way to add money to your bottom line.

See page 130 for more details.



CELERY

	▲	Maturity	Color	Plant Height	Stalk Length	Features
21003	Hudson ^{F1}	Mid season	Dark Green	26"	14-16"	<i>A tall, compact, high yielding celery with an excellent petiole count. Excellent fusarium tolerance. A popular mid-season variety.</i>
21001	Victoria ^{F1}	Early / main season	Medium Green	25"	14"	<i>Tall with fleshy petioles. Quick growing with good standing ability and is slow to bolt in early plantings. Performs well under adverse spring conditions.</i>

COLLARDS

	Days	Features
22503 Flash ^{F1}	73	<i>A vigorous, fancy, uniform, very slow bolting hybrid that offers growers an earlier Vates type.</i>
22501 Top Bunch 2.0 ^{F1}	70	<i>Early maturing variety that resembles Top Bunch with wavy, lightly savoyed leaves that regrow quickly after harvest.</i>
22001 Vates	75	<i>A popular non-heading, slow bolting collard with large blue-green leaves. Frost-resistant greens especially suited to the Mid-Atlantic region.</i>

CELERY

CELERY		M=1,000 seeds		
Price per 1,000 seeds (M)		1M	10M	25M
21003P	Hudson Pelleted	7.25	6.80	6.45
21001P	Victoria Pelleted	7.25	6.80	6.45

COLLARDS

	Priced per package	1 oz.	4 oz.		
	Priced per pound in these package sizes			1#	5#
22503	Flash	39.20	112.00	331.75	330.75
22501	Top Bunch 2.0	40.10	114.45	339.10	338.10
22001	Vates		6.60	22.30	22.05

HIGH TUNNEL & PROTECTED CULTURE INDEX

B	K	R	Mountain Spring. 113
Beets	Kale 57	Radish 93	Rambler 113
Chioggia Guardsmark 11	Kohlrabi 57	S	Roadster 113
Red Ace 11	M	Squash Summer Green	Skyway 687. 113
Touchstone Gold. 11	Mustard 63	Kopana. 95	STM2255. 113
C	P	T	Greenhouse 115
Cabbage	Peppers	Tomato	Home Garden / Bedding
Chinese 18	Bell	Cherry	Better Boy Plus 111
Cauliflower 23	Green to Red	Chocolate Sprinkles 114	Big Beef 111
Collards 24	Sprinter. 71	Gold Spark. 114	Big Beef Plus. 111
Cucumbers	Other Colors	Ruby Crush. 114	Celebrity Plus 111
Protected Culture 47	Milena 73	Sweet Hearts. 114	Early Girl 111
	Peppers Yellow	Tidy Treats 114	Lemon Boy Plus 111
	Abay 72	Fresh Market	Pink Delicious 111
	Dicaprio 72	Carolina Gold 112	RuBee Dawn 111
	Miscellaneous Sweet. 74	Laguna Red 113	RuBee Goddess 111

HIGH TUNNEL PRODUCTION

A high tunnel is a naturally heated enclosed structure that is used to grow produce while extending the growing season and controlling agronomic conditions. Also known as “hoop houses,” high tunnels are typically constructed with tubular steel frames covered by plastic, and their use is rapidly gaining popularity across the Midwest and Northeast. High tunnels significantly increase the average daily temperature of the growing environment while protecting crops from wind, rain, snow, hail, insects and diseases.

A primary advantage of high tunnels over other protection systems is that they are large enough to allow crops to be grown to full maturity and allow sufficient space for cultivation, spraying, and harvesting with the tunnels intact. By extending the season, most crops grown within a high tunnel are harvested at least a month earlier or later than field grown crops, which will earn growers a premium in the marketplace.

Which crops are typically grown within a high tunnel?

Any crop where premiums for availability of early or late fresh produce is a good candidate for high tunnel production. Crops which have an early premium such as tomatoes, peppers, cucumbers or salad greens are particularly suitable, with tomatoes being the #1 crop grown in high tunnels. We recommend choosing crops with a high yield potential and high value per unit in order to recoup your investment.

How many crops can be produced within a high tunnel per year?

At least three cropping cycles are realistic for high tunnels in most climates. Two warm season and one cool season crops within a 12 month period are feasible. With intercropping (the growing of two or more crops simultaneously), the combination of crops is almost infinite.

Planning for your high tunnel

High tunnel production carries with it a modest learning curve for growers experienced with open field production. There are several key factors that should be considered when planning to grow produce in a high tunnel.

Variety Selection

Choosing the right variety for your high tunnel is important. Varieties that perform well in the open field will not necessarily perform the same in a high tunnel. While some growers have learned

how to adapt their cropping practices in order to use open field varieties in high tunnels, going this path will require some trial and error. We have highlighted several varieties in our catalog that have a proven track record in high tunnel production.

Fertility

The proper nutrient program is important since you are dealing with crops that are demanding high input to produce above average yields. If you are planting in soil, take a soil test to see what nutrients need to be added. If you're using soil bags, make sure to keep them flushed so that the salt index does not get too high.

The first priority in your fertility program is to focus on building plant structure and then concentrate on the flowering and fruit production of the plant.

For more information on specific fertility needs we suggest contacting:

ISP Technologies Inc.
Gary Schafer: 785-760-0415
Ray Sawyer: 785-760-0993
www.ruppseeds.com/ISPTech



Pruning and Trellising

The training process begins as soon as the plants are planted in the soil medium. Building the structure and correct biomass of the plant is essential for optimal fruit production and disease prevention. This is one of the biggest learning curves when growing in the high tunnels because it depends on crop type and variety.

For example, growers that are growing indeterminate tomatoes will trellis their tomatoes on a one-leader system, whereas determinate varieties are trellised on a two-leader system. Pruning requirements will vary by variety depending on how vigorously that variety's plant grows. Determining the correct bio-mass of the plant for optimal fruit production is an ongoing learning curve. Consult with high tunnel crop advisors, as well as your seed rep, for advice on pruning practices for certain hybrids.

Pollination

A number of vegetable crops require pollinators such as bees to be present in order for pollination to take place and fruit to set. These crops include melons, some cucumbers and squash. If wild bees are present, they may enter the high

tunnel naturally. Planting cover crops such as hairy vetch, dill and alyssum around a high tunnel will help attract pollinators. If bees are not naturally present, many growers either hand-pollinate or purchase pollinators for release in the high tunnel. Contact Koppert Biological at 810-632-8750 or www.ruppseeds.com/KoppertUS if you need to purchase pollinators.



Some cucumber varieties that are targeted for high tunnel and greenhouse production are parthenocarpic, meaning that they will set fruit without pollination, and thus don't require pollinators. All the varieties listed in the cucumber protected culture section are parthenocarpic.

Air Circulation

Circulation is vital to suppress disease. Increased disease pressure comes with stagnant and humid air, which is prevalent in a high tunnel setting. Typically, high tunnels have sides that can be rolled up, but for vertical production, fans should be installed in the upper regions of the structure to provide complete air flow movement.

Pest Management and Scouting

There are certain diseases that should be scouted for on a regular basis such as: grey leaf mold (boytritus), white mold and powdery mildew. In addition, pests such as spider mites, thrips and white flies could also be present and should be included in the scouting plan. Check with your local extension agent or crop protection advisor for products that may help you control any identified disease and pest issues.

High tunnel production is growing and crop practices continue to develop as growers gain experience with production in protected culture environments. The knowledge and experience of our staff is also continuing to develop in this area and we look forward to providing support to our customers and learn from them as we grow together.

Look for this symbol in the product description tables marking items that work well in high tunnel / protected culture use.





CORN

PLANTING

Plant seeds 8 - 12 inches apart on 30 inch rows to achieve optimum yield. Seed depth should be $\frac{3}{4}$ " - $1\frac{1}{2}$ " depending on soil conditions, and genetic type. Plant when soil temperature is 60° F plus. Planting in blocks will also help increase uniformity in pollination.

See "Germination Chart" on page 125 for additional information on germination rate and days to germination at various soil temperatures.

SEEDING RATE

18,000 - 22,000 seeds per acre or one seed every 8 - 12 inches. To achieve this singulation use a finger or air seed delivery system.

MANAGEMENT

Be sure to read "Managing Insects in Sweet Corn" on page 39. Also take a look at our "Insect Scouting Resources" on page 41. Scout field every 7 days to check for insect, weed, and disease pressure. For identification of weeds, insects, and diseases consult your local extension office or view the Midwest Vegetable Production Guide.
www.ruppseeds.com/MVPG

ISOLATION

For all high quality sweet corn varieties, maintaining an isolation is required to protect the high sugar and flavor characteristics of the sweet corn as cross pollination from other types of sweet corn or different types of corn will result in starchy kernels.

SE/Synergistic types and SH2/Improved Super Sweet types should be isolated both from each other and from other types of corn including field corn, popcorn, and ornamental corn.

An isolation can be achieved either by distance or by a difference in maturity. Preferable isolations would require 700 - 1000 feet distance from other corns, or 10 - 14 days between pollination.

RELATIVE MATURITY

Sweet corn maturities are publicized as days to relative maturity. This information comes from supplier data, as well as our trial observations in the Midwest. Prolonged excessive heat or cool temperatures can cause maturity dates to fluctuate to some degree. Monitor your crop through the growing season in order to pick at optimum freshness.

HARVEST

Harvest sweet corn when the end kernels of the ear feel developed. Approximately 21 - 25 days after half silk. Sample sweet corn to ensure quality.

STORAGE

Pre-cool cob temperature to 50°F. After pre-cooling store at 34°F and 95% humidity.

DISEASE CODES

MDM - Maize Dwarf Mosaic
NLB - Northern Leaf Blight
SLB - Southern Leaf Blight

DISEASE RATINGS

R - Resistant
M - Moderate Resistant
MS - Moderately Susceptible
S - Susceptible

USE RECOMMENDATIONS

FM - Fresh Market
HG - Home Garden
P - Processing
S - Shipping

GROWER PREFERRED ALL-STARS ★ CORN

PERFORMANCE SERIES

SV9010SA (BC SH2 page 28) is the Performance Series version of EX08767143. It has the same characteristics with the addition of Roundup herbicide resistance and European corn borer, earworm and fall army worm protection. Good variety for machine harvest.

SV9014SB (BC SYN page 28) is a great mid-season corn with good flavor and eating quality, nice husk package and tip cover. Good for roadside and local markets. It also has Roundup herbicide resistance and European corn borer, earworm and fall army worm protection.

ATTRIBUTE PLUS INSECT PROTECTED

Milky Way (WH SYN page 30) A conversion of WH 0809 and Avalon with Attribute Plus traits. This variety has glufosinate herbicide tolerance as well as increased protection to European corn borer, corn earworm, armyworm, and Western bean cutworm.

SH2 / IMPROVED SUPER SWEETS

Kickoff XR (BC SH2 page 36) Currently one of the earliest maturing higher eating quality SH2's on the market. Excellent cold soil vigor with agronomics to grow through the cold spring, producing a nice husk package, high yields, ear placement, and great eating quality for that first early market.

Nirvana (BC SH2 page 37) - For those looking for a tender, high eating quality sweetcorn, Nirvana is one that has raised the bar for eating quality for many of our customers. Good vigor with consistent plant type and quality.

Octane (BC SH2 page 38) - A new 78 day outstanding quality sweet corn with extremely tender kernels and high sugars. Octane will hold on the plant for an extended period of time. Grower feedback is very positive on both eating quality and yield.

Signature XR (BC SH2 page 36) - has phenomenal eating quality, an attractive husk, excellent holding ability in the field, strong husk cover, and great ear size. This makes Signature XR the choice for quality driven fresh markets. Tolerant to HPPD/ALS.

Solstice (BC SH2 page 36) - Solstice is an early 70 day maturity. Has strong emergence, good ear size, a strong husk covered tip and exceptional tip fill. A quick snap for ease in picking and a short shank for packaging.

Xanadu (BC SH2 page 36) An offshoot of the Nirvana series, retaining exceptional eating quality and consumer appeal while bringing in a stronger plant, higher ear placement and improved disease tolerance.

Xtra Tender 274A (BC SH2 page 36) has proven to be the best cold soil tolerant variety in the SH2 category. With excellent eating quality and flavor, it does well in roadside and local markets.

SH2 / IMPROVED SUPER SWEETS CONTINUED

Eden RMN (WH SH2 page 40) In trial after trial, it has proven itself to be exceptional on every level.

Glacial (WH SH2 page 40) has taken the white sweetcorn market by storm with its very high eating quality, tenderness, and ear size. Strong plant type and grows well through adverse conditions, producing a consistent plant type and ear size.

Icon XR (Y SH2 page 43) has exceptional eating quality and is part of IFST's Reserve quality class. Excellent husk protection, ear length, and tip fill under stress. A perfect choice for high quality fresh markets and roadside stands. A yellow version of Signature XR. Tolerant to HPPD/ALS.

SYNERGISTIC

Allure (BC SYN page 35) is an excellent replacement for Kristine for a mid-season corn. Allure has the full package: good early vigor, nice husk package and excellent flavor.

Cappuccino (BC SYN page 35) a 73 day variety with great cold soil tolerance for first and second harvest. Strong disease package to hold up against NCLB and rust as well as being a good rain gap planting in the mid to late season with later maturing varieties while still holding your markets eating quality.

Mirage (WH SYN page 40) is the white version of Essence, which makes this one of our highest eating quality white Synergistic sweet corns. Tall, strong, and healthy plant type with good flavor and field holding ability. Excellent, dark green husk package and good husk cover.

Montauk (BC SYN page 35) is a proven variety with high yields and excellent flavor. It's a farmer's market favorite for yield and customer satisfaction.

Providence (BC SYN page 35) is our #1 selling bi-color Synergistic. It's the roadside growers choice for consistent sweetness and overall quality.

Temptress (BC SYN page 35) First "Quad Sweet" variety in our sweet corn lineup. Has an attractive ear with an eye-catching husk package. Moderately good cool soil emergence.



Jeff Werner
Vegetable Consultant



TEMPTATION II



ANTHEM XR II



OBSSESSION II



PASSION II



SV9010SA ★



STARFIGHTER II **NEW**



TIGER SHARK II **NEW**



SV9012SD



SV9014SB ★



GROW YOUR BEST SWEET CORN!

Our guide features tips from product selection through planting and harvest. Visit our website to download it or request a printed copy.



<https://www.ruppseeds.com/vegetables/sweet-corn-guide>

CORN

PERFORMANCE SERIES™

Can be sprayed with Roundup brand agricultural herbicide.

SE			Relative Maturity	Color	Ear Size length x diameter	Kernel Rows	Rust	Stewart's	NLB	Use	Eating Quality	Features
02138	Temptation II		72	Bi-Color	7 1/2 - 8 x 1.9"	16 - 18	M	R	M	FM	**	Compare to Temptation. Has excellent cold soil tolerance for first or second early plantings.
SH2												
03132	Anthem XR II		74	Bi-Color	8 x 1.8"	14 - 18	R			FM, S	****	Enjoy all the benefits of Anthem XR and Anthem II, combined in one hybrid. Brings the best of both worlds; the rust protection offered by Anthem XR, in tandem with Anthem II's Roundup and BT Performance Series traits.
NEW 03134	Tiger Shark II		74	Bi-Color	7.5 x 1.9"	16 - 18	R		-	FM, S	****	Tiger Shark II is the newest midseason bi-color SH2 variety. Excellent eating quality, mid-early maturity, long ear with refined kernels.
NEW 03125	Starfighter II		79	White	8 x 1.9"	16 - 18	-	M	-	FM, S	***	Starfighter II is the biotech version of SV1580SC and offers Northern Leaf Blight protection.
03080	Obsession II		80	Bi-Color	8 - 8.5 x 1.8"	16 - 20	M	M	M	FM, S	***	Compare to Obsession. Straight SH2 type that eats very similar to many improved supersweets. High-end yields.
03082	Passion II		81	Yellow	8 x 1.7"	18 - 20	M	S	S	FM, S	***	Compare to Passion. High quality SH2 with excellent shipping ability. A yellow version of Obsession.
★ 03084	SV9010SA		81	Bi-Color	8 x 1.9"	18 - 20	R	M	M	FM, S	***	Compare to 7143. Improved version of Obsession with better rust package and husk package eye appeal.
03086	SV9012SD		83	Yellow	8 x 2"	18 - 20	R	S	S	FM, S	**	Compare to 1336. An improved Passion with better tip cover.
Synergistic												
★ 04026	SV9014SB		78	Bi-Color	7.8 x 1.9"	18 - 20	R	M	M	FM	****	Maintains the same great taste and eating quality of other high quality synergistic varieties.

Performance Series™ sweet corn varieties are the only fresh market sweet corn products featuring the unique weed control benefits of Roundup WeatherMAX® and Roundup PowerMAX® agricultural herbicides. Be sure to read the label and confirm that the chemical you are spraying is 100% glyphosate with no other active ingredients.





Seminis® Performance Series™ sweet corn hybrids; another innovation that performs all season long.

Growing sweet corn might be something your family has done for generations. Or maybe it's the beginning of a new tradition. Either way, when you plant Seminis® Performance Series® sweet corn, you and your family will enjoy a great-tasting ear that you can eat fresh from the field. Performance Series® sweet corn contains the same great Roundup Ready® technology and protection from select above- and below-ground insect pests that row crop farmers are already familiar with.

Key Management Practices to Maximize Quality and Yield

- Scouting for Corn Earworm should begin prior to first silk & continue through harvest
- Use traps to monitor & count adult moths in the area
- Spray programs will be needed to maximize marketable yield

Additional information can be found in Bayer's Technology Use Guide found at the following link: www.ruppseeds.com/BayerTUG

Note: Performance Series sweet corn packages cannot be repackaged or resold. Customers need to be licensed and must be the operator/grower for all fields where the seed will be planted. Not available for purchase or use in certain counties of Oregon and Idaho.

Documents Required:



In order to purchase Performance Series sweet corn, you must have a valid Bayer Technology License. If you are licensed, please include your license number on the order form in the space provided.

If you are not licensed you may visit <https://traits.bayer.ca/en/stewardship> or call 1-800-667-4944 to register or we can mail you a 2023 Bayer Technology/Stewardship Agreement to fill out prior to us shipping your seed. Allow 3 - 4 weeks for mailed application to be processed.

CORN PERFORMANCE SERIES™

M=1,000 seeds

	Price per 1,000 seeds (M)	25M	100M
SE			
02138	Temptation II <small>Cruiser</small>	16.38	16.38
SH2			
03132	Anthem XR II <small>Cruiser</small>	18.60	18.60
03080	Obsession II <small>Cruiser</small>	18.77	18.77
03082	Passion II <small>Cruiser</small>	18.41	18.41
03125	Starfighter II <small>Cruiser</small>	18.23	18.23
03084	SV9010SA <small>Cruiser</small>	18.78	18.78
03086	SV9012SD <small>Cruiser</small>	18.14	18.14
03134	Tiger Shark II <small>Cruiser</small>	Call for Current Pricing	
Synergistic			
04026	SV9014SB <small>Cruiser</small>	16.85	16.85

INSECT RESISTANCE // HERBICIDE TOLERANCE

	Seminis Performance Series™	Syngenta Attribute® I	Syngenta Attribute® Plus	Syngenta Attribute® II
Key Sweet Corn Pest				
European Corn Borer	E	E	E	E
Corn Earworm	VG*	F-G*	E*	E*
Fall Armyworm	E	G	E	E
Black Cutworm			VG	VG
Additional Above-Ground Pests				
Southwestern Corn Borer	X		X	X
Sugarcane Corn Borer	X		X	X
Common Stalk Corn Borer	X		X	X
Southern Cornstalk Corn Borer	X		X	X
Beet Armyworm			X	X
Dingy Cutworm			X	X
Western Bean Cutworm			X	X
Additional Below-Ground Pests				
Western Corn Rootworm	X			
Northern Corn Rootworm	X			
Mexican Rootworm	X			
Protein	Cry1A.105, Cry2Ab	Cry1Ab	Vip3A, Cry1Ab	Vip3A, Cry1Ab
Herbicide Tolerance	Glyphosate	Glufosinate	Glufosinate	Glufosinate
* Depending on ear worm population [flight counts] additional scouting and spraying may be needed. Learn more by reading "Managing Insects in Sweet Corn" on page 39.				
Key: E= excellent, VG= very good, F-G= fair to good, G= good				



Cruiser® seed treatment insecticide guards against a broad spectrum of early season sucking and chewing insect pests in beans and sweet corn. By protecting the crop from the start, growers can improve stand establishment, enhance plant vigor and increase yield potential. <http://www.syngenta-us.com/crop-protection/seed-treatment/products>



Cruiser® treated items are highlighted in purple in the price tables.

Look for this symbol in the product description tables marking Cruiser treated items.



BSS 0977



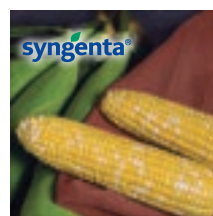
WH 0809



BC 0528











BC 0805









PATRIARCH














BSS 0761

CORN		ATTRIBUTE® Insect Protection										Can be sprayed with glufosinate herbicide.	
		Relative Maturity	Color	Ear Size length x diameter	Kernel Rows	Rust	Stewart's	NLB	Use	Eating Quality	Features	LIBERTY LINK	
SH2													
03137	BSS 0977  	78	Bi-color	8 x 1.8"	14 - 16	R	M	M	S	**	A mid-season fresh market shipper. Has an attractive ear with excellent tip fill, plus disease and ear worm control.		
Synergistic													
04018	WH 0809  	80	White	8 1/2 x 1.9"	16	R	M	S	FM	***	A white Triplesweet from Syngenta with good eating quality and disease protection. Avalon BT.		
04207	BC 0528  	81	Bi-color	8 1/4 x 1.9"	16 - 18	-	-	-	FM, HG	****	Bt version of Primus.		
04019	BC 0805  	82	Bi-color	8 x 1.9"	16 - 18	R	S	S	FM	***	A rust resistant, Bt version of Providence.		

Attribute® varieties are resistant to Liberty herbicides. They may be sprayed with conventional corn herbicides as well as Liberty (glufosinate) herbicides. Be sure to read the label and confirm that the chemical you are spraying is 100% glufosinate with no other active ingredients.

CORN		ATTRIBUTE® PLUS Insect Protection										Can be sprayed with glufosinate herbicide.	
SH2													
03108	Patriarch  	79	Bi-color	8 x 2"	16	R	-	-	FM, S	****	Augmented supersweet variety with excellent adaptability. Possesses girthy ear with great tip fill. Robust Attribute Plus package.		
03101	BSS 0761  	80	Bi-color	8 x 1.8"	16 - 18	-	-	-	FM, S	****	Offers exceptional eating quality and is ideal for the high end shipper and local markets. Has built-in insect protection and tolerance to Liberty herbicide through the Attribute trait stack.		
Synergistic													
★ 04042	Milky Way  	82	White	8 1/4 x 1.8"	16	R	-	-	FM, HG	***	The next generation of market-leading TripleSweet varieties. Offers improved insect resistance and tolerance to Liberty herbicide through the Attribute Plus trait stack.		

Attribute® varieties are resistant to Liberty herbicides. They may be sprayed with conventional corn herbicides as well as Liberty (glufosinate) herbicides. Be sure to read the label and confirm that the chemical you are spraying is 100% glufosinate with no other active ingredients.

CORN		ATTRIBUTE® II Insect Protection										Can be sprayed with glufosinate and/or glyphosate herbicides.	
SH2													
NEW 03230	Crown  	78	Yellow	8 x 2"	16	R			FM, S	*****	An Attribute II that is a strong uniform plant with uniform ears.		
NEW 03225	Matriarch  	78	Bi-color	7.75 x 2"	16 - 18	R			FM, S	*****	A strong Attribute II plant that will do well at higher plant populations.		
Synergistic													
04055	Quick Trip  	72	Bi-color	7.5 x 1.8"	14 - 16	-	-	-	FM	***	A bi-color, TripleSweet type, Quick Trip boasts a dark green husk with nice flags. Maximum planting population 20,000 per acre.		
NEW 04057	Revision  	78	Bi-color	8 x 1.8"	14 - 16				FM, S	***	Attribute II, TripleSweet, and a Remedy replacement		
04043	Remedy   & 	82	Bi-color	8 1/2 x 1.9"	16	R	-	-	FM, HG	***	Remedy is a BC 0805 type with improved insect resistance. *An additional waiver needs to be signed for this variety.		

Attribute II® varieties may be sprayed with conventional corn herbicides or either Liberty (glufosinate) herbicides and glyphosate herbicides. Be sure to read the label and confirm that the chemical you are spraying is 100% glufosinate or 100% glyphosate with no other active ingredients.





MILKY WAY ★



CROWN NEW



MATRIARCH NEW ↑



QUICK TRIP



REMEDY



REVISION NEW

syngenta®

Attribute®
Insect protection

Attribute^{Plus}®
Trait stacks

Attribute II®
Insect protection

High Quality, Picture Perfect Ears

Attribute®, Attribute Plus and Attribute II trait stacks from Syngenta are a viable crop strategy for sweet corn growers throughout the country. Commercially grown since 1998, Attribute sweet corn seeds provide a high level of above-ground protection against European corn borers and corn earworms throughout the growing season. With Attribute sweet corn, growers have another option for harvesting outstanding yields of high-quality sweet corn that meets market needs. When managed in accordance with the recommendations outlined in the stewardship agreement, Attribute sweet corn can be a valuable addition to your crop management strategy for many years to come.

Attribute Plus sweet corn seeds further extends the high-yielding potential for sweet corn growers with added Vip3A. This additional trait features greater spectrum of insect control providing a high level of above-ground protection against European corn borers and corn earworms. In addition to improved insect control, Attribute Plus also features tolerance to glufosinate herbicide for added field advantage.

Documents Required:

143

If you purchase Attribute sweet corn, you are required by the EPA to fill out and sign a Stewardship Agreement for your farm. If you already have an Attribute license, please include your license number on your

The introduced Attribute II trait stack continues the Syngenta tradition of providing high performance traits to sweet corn growers, and now it has the added power of Vip3A – a unique mode of action proprietary to Syngenta. The combination of Vip3A with Cry1Ab, the protein found in Attribute sweet corn varieties, offers excellent control of key yield-robbing insects including European corn borer, corn earworm and fall armyworm and Western bean cutworm. Attribute II® varieties may be sprayed with conventional corn herbicides or either Liberty (glufosinate) herbicides and glyphosate herbicides.

Additional information on the Attribute products can be found at the following link: www.ruppseeds.com/Attribute

Attribute® is a registered trademark of a Syngenta Group Company. LibertyLink®, Liberty® and the Water Droplet logo are registered trademarks of Bayer.

order form in the space provided. The Attribute Grower Stewardship Agreement can be found on page 143.

CORN ATTRIBUTE® Insect Protection		M=1,000 seeds	
Price per 1,000 seeds (M)		25M	100M
SH2			
03137 BSS 0977 Bi-Color Cruiser		13.59	13.59
Synergistic			
04207 BC 0528 Bi-Color Cruiser		16.00	16.00
04019 BC 0805 Bi-Color Cruiser		15.41	15.41
04018 WH 0809 White Cruiser		13.27	13.27

CORN ATTRIBUTE II® Insect Protection		M=1,000 seeds	
Price per 1,000 seeds (M)		25M	100M
SH2			
03230 Crown Yellow Cruiser		21.46	21.46
03225 Matriarch Bi-Color Cruiser		21.17	21.17
Synergistic			
04034 Aspire Yellow Cruiser		DISCONTINUED	
04055 Quick Trip Bi-Color Cruiser		20.71	20.71
04043 Remedy Bi-Color Cruiser		20.66	20.66
04057 Revision Bi-Color Cruiser		21.08	21.08

CORN ATTRIBUTE PLUS® Insect Protection		M=1,000 seeds	
Price per 1,000 seeds (M)		25M	100M
SH2			
03101 BSS 0761 Bi-Color Cruiser		18.74	18.74
03108 Patriarch Bi-Color Cruiser		20.83	20.83
Synergistic			
04042 Milky Way White Cruiser		20.53	20.53



Cruiser® seed treatment insecticide guards against a broad spectrum of early season sucking and chewing insect pests in beans and sweet corn. By protecting the crop from the start, growers can improve stand establishment, enhance plant vigor and increase yield potential.

www.ruppseeds.com/Cruiser



Cruiser® treated items are highlighted in purple in the price tables.

Look for this symbol in the product description tables marking Cruiser treated items.

Sweet Corn Genetic Types

Sweet corn is one of the most popular vegetables grown in the United States. Sweet corn hybrids, like many vegetable varieties, have seen improvements that enhance eating quality in the areas of sugar content, flavor, tenderness and appearance. Commercial growers also experience benefits of these improved hybrids with higher yields, disease resistance, better plant structure, insect and herbicide resistance, etc.

Producing and preserving the eating quality potential of the hybrids is a key factor for the grower's success in his market. Knowing the genetic type of each hybrid is essential as the grower prepares a cropping plan. Each genetic type has some risks of cross pollination with other types, which can negatively impact eating quality in the crop produced. Maintaining an isolation between types or selecting hybrids within compatible genetic type groups will ensure that the eating quality of each hybrid has been preserved.

Our 2023 Vegetable Resource Guide includes over 100 sweet corn hybrids in the 6 genetic types shown here. Several of these types are related, so from a variety selection and crop planning perspective, we view them as 3 genetic type groups. Each group has slightly different recommendations for the other types they need to be isolated from. Please see the genetic type groups to the right for more information on the characteristics of each group and its isolation requirements.

ISOLATION

For all **high quality** sweet corn varieties, maintaining an isolation is required to protect the high sugar and flavor characteristics of the sweet corn as cross pollination from other types of sweet corn or different types of corn will result in starchy kernels.

SE/Synergistic types and SH2/Improved Super Sweet types should always be isolated both from each other and from other types of corn including field corn, popcorn, and ornamental corn.

An isolation can be achieved either by distance or by a difference in maturity. Preferable isolations would require 700 – 1000 feet distance from other corns, or 10 – 14 days between pollination.

Helping growers produce the best sweet corn for their markets has been a priority for us since we started in the vegetable business. These graphics are from a "Designer Genes" brochure we published in the early 1980s.



SU NORMAL

- Traditional sweet corn genotype (SU gene)
- Exceptional seed vigor and germination
- Strong, old fashion corn flavor
- One day window where sugars are at their peak before converting to starch

For best flavor, isolate from SH2 and Improved Super Sweet types and dent corn, popcorn, and ornamental corn.

SE

- Sugary enhancer (SE) gene
- Sweetness, flavor, and texture are improved over SU types
- Three day window where sugars are at their peak before converting to starch
- Typically used for freezing

SYNERGISTIC

- Tender kernels with higher sugars than SE
- Longer shelf life than SE
- Approximately five days from when sugars are at their peak before converting to starch
- Great for local and roadside markets seeking the balance between that old fashion flavor and the high sugar corns.

For best flavor, isolate from SU, SH2, and Improved Super Sweet types and also dent corn, popcorn, and ornamental corn.

SH2

SH2 EXTRA SWEET

- Shrunk (SH2) gene raises the sugar levels and field holding ability.
- Increased shelf life improves ease of distribution
- Harder kernel gives a snap bite
- Less damage during harvest
- Ten day window where sugars are at their peak before converting to starch
- Needs warmer soils (65° F or higher) for germination

IMPROVED SUPER SWEETS

- A perfect blend of tender SE type kernel with the high sugar flavors of SH2
- Ten day window where sugars are at their peak before converting to starch
- Needs warmer soils (65° F or higher) for germination

For best eating quality, isolate from SU, SE, and Synergistic types as well as dent corn, popcorn, and ornamental corn.

EATING QUALITY RATING

The Rupp 5 Star rating is used to help growers differentiate sweetcorn varieties within each genetic class for eating quality based on sweetness, tenderness and corn flavor. These ratings are an average of our sampling scores that are compiled from multiple locations across various growing regions.

SWEET CORN MATURITY INDEX

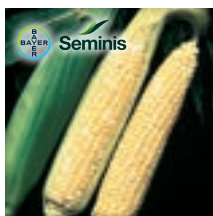
BI-COLOR	Relative Maturity	Genetic Type	Page #
Catalyst XR	66	Improved Super Sweets	36
Bolt XR	67	Improved Super Sweets	36
Fastlane	67	SE	34
Latte	68	Synergistic	35
QuickStart	68	Synergistic	35
Kickoff XR	69	Improved Super Sweets	36
Solstice	70	Improved Super Sweets	36
Tempress	70	Synergistic	35
Hero XR	71	Improved Super Sweets	36
Ignition	72	Improved Super Sweets	36
Profit	72	Synergistic	35
Quick Trip	72	Synergistic	30
Signature XR	72	Improved Super Sweets	36
Temptation	72	SE	34
Temptation II	72	SE	28
Xtra Tender 2472 XR	72	Improved Super Sweets	36
Anthem XR	73	Improved Super Sweets	36
Cappuccino	73	Synergistic	35
Anthem XR II	74	SH2	28
Tiger Shark II	74	SH2	28
Xtra Tender 274A	74	Improved Super Sweets	36
Xanadu	74 - 75	Improved Super Sweets	36
Allure	75	Synergistic	35
Ambrosia	75	SE	34
Caliber XR	75	Improved Super Sweets	36
Luscious	75	SE	34
Nirvana	75	Improved Super Sweets	37
Nectar	76	Synergistic	35
Tempo XR	76	Improved Super Sweets	37
American Dream	77	Improved Super Sweets	37
ACes	78	Improved Super Sweets	38
AP358	78	Improved Super Sweets	38
BSS 0977	78	SH2	30
Cadence XR	78	Improved Super Sweets	38
Crave	78	Improved Super Sweets	38
Essence	78	Synergistic	35
Matriarch	78	SH2	30
Octane	78	Improved Super Sweets	38
Revision	78	Synergistic	30
SV9014SB	78	Synergistic	28
Enchanted	79	Improved Super Sweets	38
Montauk	79	Synergistic	35
Patriarch	79	SH2	30
7143 <small>EX08767143</small>	80	SH2	38
BSS 0761	80	SH2	30
Obsession II	80	SH2	28
BC 0528	81	Synergistic	30
Primus	81	Synergistic	35
SV9010SA	81	SH2	28
BC 0805	82	Synergistic	30
Remedy	82	Synergistic	30
Delectable	84	SE	34

WHITE	Relative Maturity	Genetic Type	Page #
Leadoff MXR	69	Improved Super Sweets	40
Eden RMN	74	Improved Super Sweets	40
7401 Imp	75	Improved Super Sweets	40
Glacial	76	Improved Super Sweets	40
Mirage	78	Synergistic	40
Starfighter II	79	SH2	28
WH 0809	80	Synergistic	30
Milky Way	82	Synergistic	30

YELLOW	Relative Maturity	Genetic Type	Page #
Café	68	Synergistic	42
Takeoff MXR	69	Improved Super Sweets	43
Icon XR	72	Improved Super Sweets	43
Xtra Tender 1572	72	Improved Super Sweets	43
Inferno	74	Synergistic	42
Bodacious RM	75	SE	42
Gold Nuggets	75	SE	42
Gold Standard	76	Synergistic	42
Crown	78	SH2	30
Honey Select	79	Synergistic	42
Passion II	81	SH2	28
SV9012SD	83	SH2	28
Incredible R/M	85	SE	42



FASTLANE



TEMPTATION



LUSCIOUS TSW



LATTE



INOCULANT FOR SWEET CORN

SabrEX™ root inoculant is available for sweet corn. Apply at a rate of .5 oz. per 50 pounds of seed.

See page 123 for more information and pricing.

EATING QUALITY RATING

The Rupp 5 Star rating is used to help growers differentiate sweetcorn varieties within each genetic class for eating quality based on sweetness, tenderness and corn flavor. These ratings are an average of our sampling scores that are compiled from multiple locations across various growing regions.

CORN		BI-COLOR SE									
		Relative Maturity	Ear Height	Ear Size length x diameter	Kernel Rows	Rust	Stewart's	NLB	Use	Eating Quality	Features
02189	Fastlane	67	14"	7 x 1.7"	14 - 16	M	S	S	FM, HG	**	A first early variety with good cold soil vigor, very attractive ear.
02137	Temptation	72	18"	8 x 1.8"	16	S	S	S	FM	**	A Seminis product for the first early slot. Has excellent cold soil emergence.
02126	Ambrosia	75	20"	8 x 2"	16	S	R	M	FM, HG	***	A bi-color version of Bodacious with good vigor.
02178	Luscious	75	15"	8 x 1.9"	16 - 18	M	M	M	FM, HG	***	A hybrid that produces an attractive blunt ear on an excellent plant package.
02132	Delectable	84	26"	9 x 2.1"	18	M	M	M	FM, HG	****	Bi-color version of Incredible. Large ear, dark green husk.

CORN BI-COLOR SE		M=1,000 seeds				
Priced per pound in these package sizes		1#	5#	25#	50#	100#*
02126	Ambrosia	19.25	18.00	17.65	17.25	16.95
02132	Delectable	19.20	17.95	17.60	17.20	16.90
Price per 1,000 seeds (M)		2.5M	10M	25M	100M	500M*
02189	Fastlane Cruiser	10.75	10.00	9.55	9.10	9.00
02178	Luscious Cruiser	7.60	6.85	6.40	5.95	5.85
02137	Temptation Cruiser	9.95	9.20	8.75	8.30	8.20

* Multiple packages may be used to fill orders for these quantities.

CORN BI-COLOR Synergistic		M=1,000 seeds				
Price per 1,000 seeds (M)		2.5M	10M	25M	100M	500M*
04009	Allure Cruiser	12.70	11.95	11.50	11.05	10.95
04044	Cappuccino Cruiser	12.65	11.90	11.45	11.00	10.90
04039	Essence Cruiser	12.85	12.10	11.65	11.20	11.10
04032	Latte Cruiser	13.00	12.25	11.80	11.35	11.25
04021	Montauk Cruiser	13.20	12.45	12.00	11.55	11.45
04052	Nectar Cruiser	12.40	11.65	11.20	10.75	10.65
04210	Primus Cruiser	13.25	12.50	12.05	11.60	11.50
04214	Profit Cruiser	11.55	10.80	10.35	9.90	9.80
04014	Providence Cruiser	10.70	9.95	9.50	9.05	8.95
04020	QuickStart Cruiser	12.35	11.60	11.15	10.70	10.60
04013	Serendipity Cruiser	9.85	9.10	8.65	8.20	8.10
04049	Temptress Cruiser	12.10	11.35	10.90	10.45	10.35

* Multiple packages may be used to fill orders for these quantities.



QUICKSTART



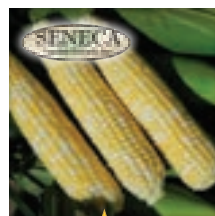
TEMPTRESS



PROFIT



CAPPUCCINO



ALLURE



NECTAR



ESSENCE



MONTAUK





















PRIMUS



PROVIDENCE



SERENDIPITY

CORN			BI-COLOR Synergistic										Pricing on page 34	
			▲ Relative Maturity	Ear Height	Ear Size length x diameter	Kernel Rows	Rust	Stewart's	NLB	Use	Eating Quality	Features		
04032	Latte		68	20"	7 ½ - 8 x 1.7"	12 - 16	-	-	-	FM	**	First early variety with excellent ear length in this class. Very good eating corn with a dark green husk package.		
	04020	QuickStart		68	22"	8 x 1.8"	16	R	-	M	FM, HG	****	QuickStart is an exciting addition to our early maturity line up. It has a strong plant and large ear as well as excellent eating quality for its season. QuickStart has strong emergence and vigor and is a great choice for your early sweet corn plantings.	
	04049	Temptress		70	16"	7 ¾ x 2"	14 - 16	R	-	M	FM, HG	****	First "Quad Sweet" variety in our sweet corn lineup. Has an attractive ear with an eye-catching husk package. Moderately good cool soil emergence.	
	04214	Profit		72	22"	8 x 1.8"	14	M	M	M	FM, HG	***	Proved itself in recent multiple locations as one of the year's favorites. Very large ears with attractive flags, good husk cover and tip fill. Great eating quality.	
	04044	Cappuccino		73	17"	7 ½ - 8 x 1.9"	16	M	M	M	FM, HG	***	Superb eating quality. Plant mid to late season or for rain gap filler. Excellent disease package.	
	04009	Allure		75	25"	8 x 1.8"	16	R	R	R	FM, HG	****	A Seneca Vegetable Research hybrid with good early vigor. Nice husk package with great eating quality and flavor.	
	04052	Nectar		76	18"	8 ¼ x 1.9"	14 - 16	-	-	MR	FM, HG	*****	Very good eating quality. Excellent ear size for roadside markets. High quality package includes dark husk color and flags. Stalk has solid standability.	
	04039	Essence		78	18"	8 x 1.8"	16 - 18	M	M	M	FM	****	Excellent eating quality. High row count for a refined kernel. Compare to Providence with a few days earlier maturity.	
	04021	Montauk		79	18"	8 x 1.8"	16 - 20	S	M	M	FM	****	A widely adapted hybrid with good vigor, high yields and excellent flavor.	
	04210	Primus		81	18"	8 x 2"	14 - 16	M	M	S	FM	*****	A proven TripleSweet PLUS variety from Syngenta with approximately 15% higher sugar than Providence. Performs well under plastic and in late plantings.	
	04014	Providence		82	18"	8 ½ x 1.9"	16 - 18	R	S	S	FM	****	A rust resistant version of Serendipity with excellent eating quality.	
	04013	Serendipity		82	18"	8 x 1.9"	16 - 18	S	S	S	FM, HG	****	A variety with an added supersweet kick for extended shelf life and higher eating quality.	



CATALYST XR



BOLT XR **NEW**



KICKOFF XR ★



SOLSTICE ★



HERO XR

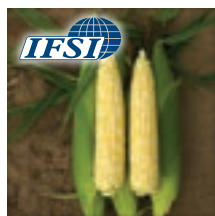


IGNITION

CORN		BI-COLOR SH2 Extra Sweet & Improved Super Sweets									Pricing on page 37	
		▲ Relative Maturity	Ear Height	Ear Size length x diameter	Kernel Rows	Rust	Stewart's	NLB	Use	Eating Quality	Features	
03117	Catalyst XR 	66	27"	8 x 1.75"	16-18	R	-	-	FM, S	**	Catalyst XR is the earliest supersweet on the market. Has admirable ear size, strong tip fill, as well as outstanding kernel color and sweetness. Perfect for early fresh market and shipping. Tolerant to HPPD/ALS.	
 03245	Bolt XR 	67	16"	7.25 x 1.8"	14-18	R		M	FM	****	Bolt XR is a first early planting, bi-color fresh market hybrid, with first class eating quality. Excellent husk coverage and tip fill. A dark green husk package and sound ear size make Bolt XR an ideal hybrid for roadside stands.	
 03038	Kickoff XR 	69	28"	8 ¼ x 1.9"	16-18	M	-	MS	FM, S	****	Impeccable eating quality for early in the season. Very good white to yellow kernel contrast. Strong tip fill. Tolerant to HPPD/ALS.	
 03109	Solstice 	70	20"	7.5 x 1.8"	16	-	-	M	FM	*****	Solstice is an early 70 day maturity. Has strong emergence, good ear size, a strong husk covered tip and exceptional tip fill. A quick snap for ease in picking and a short shank for packaging.	
03037	Hero XR 	71	23"	7 ¾ x 1.8"	14-16	R	-	MS	S	**	Excellent early variety with great husk protection. Kernels fill beautifully to form a very attractive ear early in the season. Tolerant to HPPD/ALS.	
03233	Ignition 	72	23"	8" x 1.8"	16 - 18	IR	IR	IR	FM, HG	****	Ignition is a new 72 day bi-color with strong cold soil emergence, a tender bite and consistent high yield potential with a high quality ear.	
 03215	Signature XR 	72	27"	8 x 1.8"	16-18	R	-	-	FM	*****	Signature XR has phenomenal eating quality, an attractive husk, excellent holding ability in the field, strong husk cover, and great ear size make Signature XR the choice for quality driven fresh markets. Tolerant to HPPD/ALS.	
03013	Xtra Tender 2472 XR 	72	24"	8 ½ x 1.6"	14 - 16	R	S	S	FM, S	****	Rust resistant version of Xtra Tender 2170.	
03003	Anthem XR 	73	24"	8 x 1.8"	16 - 20	R	M	M	FM, S	****	Excellent yield potential and better than average lodging tolerance. Superb eating quality. Great all season long.	
 03119	Xanadu  	74 - 75	25"	8 x 2"	16 - 18	-	-	R	FM, HG	*****	Xanadu, being part of the Nirvana series, incorporates a stronger plant, higher ear placement and improved disease resistance while maintaining exceptional eating quality and consumer appeal.	
 03174	Xtra Tender 274A 	74	23"	8 x 2"	18 - 20	S	M	S	FM, HG	****	An IFSI bi-color hybrid with excellent cold soil vigor and fantastic eating quality. Has medium long husk protection. Tolerant to HPPD/ALS.	
03091	Caliber XR 	75	21"	8 ¼ x 1.8"	16-18	M	-	MS	FM	***	Superb eating quality with refined kernels for excellent texture. Plants are healthy and very clean for easier picking.	



SIGNATURE XR ★



XTRA TENDER
2472 XR



ANTHEM XR



XTRA TENDER ★
274A



CALIBER XR



TEMPO XR



UNIQUE TASTE & TEXTURE

From the Nirvana series of
sweet corn from Crookham.



XANADU ★



NIRVANA ★



EDEN RMN ★

CORN

BI-COLOR SH2 Extra Sweet & Improved Super Sweets

			Relative Maturity	Ear Height	Ear Size length x diameter	Kernel Rows	Rust	Stewart's	NLB	Use	Eating Quality	Features
★	03025	Nirvana	75	24"	8 x 1.8"	16	M	-	R	FM, HG	*****	Combination of great vigor and emergence along with fantastic flavor and texture.
	03122	Tempo XR	76	26"	8x2"	16-20	R		MS	FM	***	Tempo XR has excellent husk protection and consistent tip fill across varying environmental conditions. Tempo XR has a great ear size for mid-season roadside and fresh markets.
	03058	American Dream	77	26"	7.5 x 2"	16-18	R	-	M	FM, HG	****	Trim ear with extraordinary tip fill. Eats exceptionally well. Beautiful flag leaves for improved marketability. An AAS winner.
	03102	Cumberland	77	30"	8 x 1.9"	16-18	R	-	-	FM, HG	***	Prolific Harris Moran variety with attractive ear and husk package. Sweet flavor and fantastic texture. Ideally grown for retail stands and farm markets.

Additional Bi-Color Improved Super Sweet corn can be found on the next page --->.

CORN BI-COLOR SH2 Extra Sweet & Improved Super Sweets

	Price per 1,000 seeds (M)	2.5M	10M	25M	100M	500M*
03199 7143 EX08767143 Cruiser		12.50	11.75	11.30	10.85	10.75
03023 ACes Cruiser		10.30	9.55	9.10	8.65	8.55
03058 American Dream Cruiser		14.05	13.30	12.85	12.40	12.30
03003 Anthem XR Cruiser		13.60	12.85	12.40	11.95	11.85
03007 AP358 Cruiser		14.75	14.00	13.55	13.10	13.00
03245 Bolt XR Cruiser		14.45	13.70	13.25	12.80	12.70
03218 Cadence XR Cruiser		13.75	13.00	12.55	12.10	12.00
03091 Caliber XR Cruiser		13.05	12.30	11.85	11.40	11.30
03117 Catalyst XR Cruiser		13.80	13.05	12.60	12.15	12.05
03216 Crave Cruiser		11.70	10.95	10.50	10.05	9.95
03102 Cumberland Cruiser		12.50	11.75	11.30	10.85	10.75
03039 Enchanted Cruiser		12.45	11.70	11.25	10.80	10.70

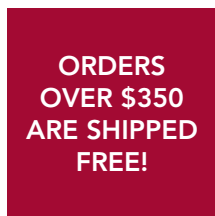
CORN BI-COLOR SH2 Extra Sweet & Improved Super Sweets

	Price per 1,000 seeds (M)	2.5M	10M	25M	100M	500M*
03037 Hero XR Cruiser		13.70	12.95	12.50	12.05	11.95
03233 Ignition Cruiser		12.95	12.20	11.75	11.30	11.20
03038 Kickoff XR Cruiser		14.05	13.30	12.85	12.40	12.30
03025 Nirvana Cruiser		14.20	13.45	13.00	12.55	12.45
03235 Octane Cruiser		12.95	12.20	11.75	11.30	11.20
03215 Signature XR Cruiser		14.10	13.35	12.90	12.45	12.35
03109 Solstice Cruiser		13.95	13.20	12.75	12.30	12.20
03122 Tempo XR Cruiser		14.10	13.35	12.90	12.45	12.35
03119 Xanadu Cruiser		14.50	13.75	13.30	12.85	12.75
03174 Xtra Tender 274A Cruiser		13.25	12.50	12.05	11.60	11.50
03013 Xtra Tender 2472 XR Cruiser		11.20	10.45	10.00	9.55	9.45

* Multiple packages may be used to fill orders for these quantities.



AMERICAN DREAM



ACES



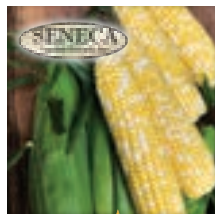
AP358



CADENCE XR



CRAVE



OCTANE ★











ENCHANTED



7143 EX08767143

EATING QUALITY RATING

The Rupp 5 Star rating is used to help growers differentiate sweetcorn varieties within each genetic class for eating quality based on sweetness, tenderness and corn flavor. These ratings are an average of our sampling scores that are compiled from multiple locations across various growing regions.

CORN		BI-COLOR SH2 Extra Sweet & Improved Super Sweets									Pricing on page 37	
		▲ Relative Maturity	Ear Height	Ear Size length x diameter	Kernel Rows	Rust	Stewart's	NLB	Use	Eating Quality	Features	
03023	ACes 	78	28"	8 x 1.9"	16 - 18	R	R	MS	FM	****	No fear of getting lost in the shuffle, this variety has been smoking good in trials the past couple of years. High marks across the board. A game changer.	
03007	AP358 	78	20"	8 x 1.9"	16-18	M	M	M	FM	****	Crookham variety that sets a new standard for eating quality in the improved SH2 category. The AP in the name refers to Augmented PLUS. With easy snap, good tip fill and attractive husk package.	
03218	Cadence XR 	78	25"	7.75 x 2"	16 - 20	R	-	MS	FM, S	****	Cadence XR is a full season high eating quality hybrid with ideal ear size for roadside markets. Cadence XR has an attractive husk package with good flag leaves and resistance to common rust.	
03216	Crave 	78	20"	8 x 1.8"	16-18	-	-	-	FM, HG	****	A Glacial bi-color type with a great husk package, large ear and excellent eating quality that customers will crave. Vibrant bi-color kernels, great husk length, color and flags. Medium tall plant.	
 03235	Octane 	78	26"	8 x 1.8"	16 - 18	IR	IR		FM, HG	****	A 78 day outstanding quality sweet corn with extremely tender kernels and high sugars. Octane will hold on the plant for an extended period of time.	
03039	Enchanted 	79	28"	8 x 2"	18 - 20	M	M	M	FM, HG	****	Offers all the flavor and texture you would expect from an augmented farm market hybrid. Plump, sweet kernels.	
03199	7143 <small>EX08767143</small> 	80	26"	8 x 1.9"	18 - 20	R	M	M	S	***	An improved version of Obsession that has a better rust package, eye appeal and eating quality.	

MANAGING INSECTS IN SWEET CORN

Corn Ear Worm is the greatest threat to sweet corn growers across the Midwest and Northeast - creating the potential for our customers to lose profits. We have heard reports from growers and university researchers that not all insecticides are created equal and do not provide adequate control that is needed. Labels often do not communicate its effectiveness on potential resistant insect populations. Each growing region may have varying degrees of resistance. It is best to contact local extension personnel or chemical retailers to see what works best in your growing region. It is a best management practice to always rotate modes of actions.

We have put together a “Sweet Corn Growing Guide” (information below) to help growers monitor and combat this profit robbing insect. We also have a helpful section titled “Insect Scouting Resources” on page 41. Please feel free to call in to request your copy of our “Sweet Corn Growing Guide” to find other helpful tips and ways to control other Lepidoptera that can cause severe damage to sweet corn such as: European corn borer, fall armyworm and Western bean cut worm.

MONITORING EUROPEAN CORN BORER AND CORN EARWORM

One of the keys to successfully managing European corn borers and corn earworms on sweet corn is to determine when the insects are active. European corn borers can be monitored effectively with blacklight traps and field observations, and corn earworms can be monitored with pheromone traps. When moths are being caught in the traps, it means they are laying eggs.

Corn borer eggs are laid on leaves, usually on the undersides, in the region of the ear. Larvae feed on the leaves and later may migrate to the ears (if present).

Corn earworm moths lay their eggs directly on green silks. The larvae that hatch from those eggs will follow the silks down into the tips of the ears.

Because these two insects' egg laying behavior differ, control strategies also differ. Corn borers can be controlled by spraying during the late whorl, tasselling, and silking stages. The migrating larvae should contact a lethal dose of insecticide while moving to the ear zone. Corn earworms must be controlled by directing sprays at the silks so larvae will immediately contact the insecticide after hatching.

For corn borers, treat during the late whorl stage if 20 percent or more of the plants show larval feeding. The presence of large numbers of moths in light traps also justifies treatment. One application during the late whorl stage, followed by additional treatments every five days up until seven days of harvest, usually provides adequate control.

For corn earworms, treatment is justified if fresh green silks are present and moths are being caught in pheromone traps. In general, the higher the moth catches, the shorter the interval between sprays. If fewer than five moths are being caught per night, a five-day spray interval should be adequate. As moth catches approach 50 to 100 per night, a two- to three-day spray interval would be more appropriate. Determining the spray interval exactly depends on many factors, including how much damage you can tolerate, the crop's value, and the cost and effectiveness of the insecticide. Stop treating for corn earworms when 90 percent of the silks are brown.

Obviously, growers should not treat separately for these two pests. Some of the insecticides recommended here are effective against both species. Choose insecticides that are more effective against the particular pest that is most prevalent at the time of application. If both pests are present, choose an insecticide that will adequately control both.

INSECT PROTECTED VARIETIES

Insect protected sweet corn varieties such as Syngenta's Attribute, Attribute Plus, and Attribute II Insect Protected corn and the Performance Series from Seminis should be considered as they will allow the grower to decrease the number of sprays that need to be applied. While these products have a built in resistance to some insects, they do not eliminate the need for insect scouting and occasional spraying. Using these varieties in combination with a reduced spray program will lead to great results. The extra investment in seed cost pays off in reduced spray and fuel costs as well as less time in the fields, making insect protected varieties an interesting alternative.

Wire traps and lures are available from several sources. A quick search on-line will guide you to many retailers including Gempler's.



GROW YOUR BEST SWEET CORN!

Our guide features tips from product selection through planting and harvest. Visit our website to download it or request a printed copy.



<https://www.ruppseeds.com/vegetables/sweet-corn-guide>



MIRAGE ★



LEADOFF MXR



EDEN RMN ★



7401 IMP



GLACIAL ★

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CORN		WHITE Synergistic									
		Relative Maturity	Ear Height	Ear Size length x diameter	Kernel Rows	Rust	Stewart's	NLB	Use	Eating Quality	Features
★	04016 Mirage	78	18"	8 x 1.8"	16 - 18	M	M	M	FM	****	Excellent eating quality. High row count for a refined kernel. High yield potential. White version of Essence.

CORN		WHITE SH2 Extra Sweet & Improved Super Sweets									
		Relative Maturity	Ear Height	Ear Size length x diameter	Kernel Rows	Rust	Stewart's	NLB	Use	Eating Quality	Features
	03243 Leadoff MXR	69	23"	7 1/4-8 x 1.9-2"	16 - 18	R	-	M	FM, HG	****	Leadoff MXR is a first early hybrid with a high kernel row count and good kernel color. Has a great disease package and a very good husk protection. Leadoff the season right with this fresh market and roadside variety. Tolerant to HPPD/ALS.
★	03224 Eden RMN	74	26"	8 x 1.75 - 2"	16 - 18	R	-	R	FM, HG	*****	Eden RMN retains the incredible taste of Eden with key improvements: stronger disease package, slightly higher ear height, and a taller plant. It adds a new level of dependability and will have strong marketshare for growers.
	03049 7401 Imp	75	28"	8 x 1.8"	16 - 18	M	R	M	FM, HG	****	Bright kernel color. Good husk package. Fantastic flavor.
★	03100 Glacial	76	26"	8 x 1.9"	16 - 18	-	-	-	FM, P	*****	Has incredible white kernels that stay white! Very good tip fill and eating quality. Fine addition to a white corn planting program.

CORN WHITE Synergistic		M=1,000 seeds				
		Price per 1,000 seeds (M)				
		2.5M	10M	25M	100M	500M*
04016	Mirage <small>Cruiser</small>	11.80	11.05	10.60	10.15	10.05

* Multiple packages may be used to fill orders for these quantities.

CORN WHITE SH2 Extra Sweet & Improved Super Sweets		M=1,000 seeds				
		Price per 1,000 seeds (M)				
		2.5M	10M	25M	100M	500M*
03049	7401 Imp <small>Cruiser</small>	13.05	12.30	11.85	11.40	11.30
03224	Eden RMN <small>Cruiser</small>	14.10	13.35	12.90	12.45	12.35
03100	Glacial <small>Cruiser</small>	13.00	12.25	11.80	11.35	11.25
03243	Leadoff MXR <small>Cruiser</small>	14.05	13.30	12.85	12.40	12.30

* Multiple packages may be used to fill orders for these quantities.

2022 SWEET CORN TRIAL REPORT

This year, on April 22, we planted our cold soil trial. We looked at 32 different entries. Most of the entries were two row plots 20 feet long. In addition, we trialed four varieties to see how they performed in large block trial settings. The field was a little on the wetter side, but I felt it was under good enough conditions to level up the chisel plowed ground. From April 22 to May 9th, we averaged a soil temperature of 57.8 degrees at 2" deep.

A few newer varieties we looked at were **Kickoff**, **Bolt**, **Solstice**, **Xanadu**, and **Eden RMN**. We liked what we are seeing, and it was interesting to see how each one preformed. Each hybrid brings a little different attribute that helps set them apart. I look forward to hearing how they performed on your farm.

Under the Synergistic umbrella we are continuing to build confidence in Temptress. Temptress has a trifecta effect when it comes to early corn. It has good agronomic value coupled with a nice balance of creaminess and sugar. This year we are introducing **Quick Start**, a 72-day bicolor from Crookham. It has performed well as an experimental number. We look forward to hearing how it performs for you.

We looked at 129 different varieties on the Synergistic side. With a few new people working in customer service, I took the opportunity to go back and relook over a few of the old well known corns like **Bodacious** and **Jackpot**. This gave them the opportunity to experience and taste for themselves the difference. It is amazing how sweet corn has changed over the years.

In the SH2 sweet corn trial, we evaluated 393 varieties. We are still excited about the performance of **Solstice**, **Signature**, **Xanadu**, **American Dream**, and **Eden RMN**. A few new ones that stuck out in my notes are **Ignition**, **Icon XR**, and **Matriarch**.

This year I traveled to Tolono, Illinois to visit with the sweet corn breeder at IFSI. It was good to see how other people in the seed industry evaluate sweet corn. In late July, I traveled to a sweet corn trial in Fremont, Ohio to see what Crookham has coming down the pipeline. It is great to work with breeders that have a passion and desire to hear feedback. I have already started my list of sweet corns to trial in 2023. I am sure that 2023 will have something educational from which we can learn.

We also participate in university trials. We have found that Purdue and The Ohio State University do an excellent job at trialing. Follow the links to review their findings.

The Ohio State SH2 Trial

www.ruppseeds.com/OhioSH2C



Purdue Supersweet Trial

www.ruppseeds.com/PurdueSSC



We have several experimental varieties that we are getting excited about and have a lot of promise. We look forward to seeing these hybrids again next summer.

by: *Pete Dinius* - Product Development

INSECT SCOUTING RESOURCES

www.ruppseeds.com/InsectForecast

Learn more about current corn insect pressure.



www.ruppseeds.com/NYSweetCorn

This is a link to the NY Sweet Corn Trap Network Report. It also contains a mountain of information on best management practices for sweet corn growers. They also have several fact sheets on individual pest as well as videos on how to set up and maintain your own Trap and Monitoring system.



SWEET CORN PRODUCTION RESOURCES

www.ruppseeds.com/SCPestID

This is a resource from the Great Lakes Vegetable Working Group in addition to some of the leading researchers in the vegetable industry. It helps identify profit taking weeds and insects, and discusses best management practices for sweet corn.



www.ruppseeds.com/UMassSC

This page from the University of Massachusetts offers information about multiple sweet corn pests and diseases.



www.ruppseeds.com/uoiscout

Developed by Rick Weinzierl this link goes into discussing the difference between traps and economics of scouting.





BODACIOUS RM



GOLD NUGGETS



INCREDIBLE R/M



CAFÉ



INFERNO



GOLD STANDARD NEW

CORN		YELLOW SE									
		Relative Maturity	Ear Height	Ear Size length x diameter	Kernel Rows	Rust	Stewart's	NLB	Use	Eating Quality	Features
02055	Bodacious RM	75	20"	8 x 1.8"	18	R	M	M	FM, HG	***	A rust resistant Bodacious, same flavor, superior plant and yield. Give this a try.
02007	Gold Nuggets	75	24"	8 x 2"	20	M	M	M	FM, HG	****	The best eating SE, large eared, superior holding. Good for freezer corn.
02056	Incredible R/M	85	30"	9 x 2"	18	R	M	M	FM, HG	***	Rust resistant and MDM resistant Incredible.

CORN		YELLOW Synergistic								
		Relative Maturity	Ear Height	Ear Size length x diameter	Kernel Rows	Use	Eating Quality	Features		
04045	Café	68	15"	7.75 x 1.7"	14	FM, HG	***	Yellow version of Latte.		
04008	Inferno	74	18"	8 1/4 x 1.8"	14 - 16	FM, HG	***	Has excellent husk cover with a dark green plant and flag leaves, creamy flavor with the right balance of texture.		
NEW 04004	Gold Standard	76	28"	8 x 1.8"	18	FM, HG	****	Gold Standard sets the standard for eating quality in the Yellow Quad class. The strong emergence and plant style also make this variety stand out from its competitors.		
04012	Honey Select	79	18"	8 1/2 x 2"	18 - 20	FM, HG	***	A Syngenta AAS winner with similar genetic type to Serendipity only yellow kernels. Easy to grow, good vigor, and high sugars.		

CORN YELLOW SE		Priced per pound in these package sizes				
		1#	5#	25#	50#	100#*
02055	Bodacious RM	17.90	16.65	16.30	15.90	15.60
02007	Gold Nuggets	18.25	17.00	16.65	16.25	15.95
02056	Incredible R/M	17.95	16.70	16.35	15.95	15.65

* Multiple packages may be used to fill orders for these quantities.

CORN YELLOW Synergistic		M=1,000 seeds				
		Price per 1,000 seeds (M)	2.5M	10M	25M	100M 500M*
04045	Café <small>Cruiser</small>		12.70	11.95	11.50	11.05 10.95
04004	Gold Standard <small>Cruiser</small>		12.20	11.45	11.00	10.55 10.45
04012	Honey Select <small>Cruiser</small>		8.75	8.00	7.55	7.10 7.00
04008	Inferno <small>Cruiser</small>		11.40	10.65	10.20	9.75 9.65

* Multiple packages may be used to fill orders for these quantities.



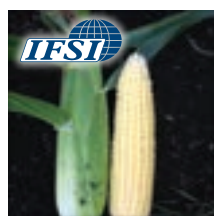
HONEY SELECT



TAKEOFF MXR



ICON XR ★



XTRA TENDER
1572



CORN		YELLOW SH2 Extra Sweet & Improved Super Sweets									
		Relative Maturity	Ear Height	Ear Size length x diameter	Kernel Rows	Rust	Stewart's	NLB	Use	Eating Quality	Features
03223	Takeoff MXR	69	28"	8 x 1.9"	16 - 18	R	-	MS	FM, S	****	Takeoff MXR has an excellent disease package and seedling vigor for an early hybrid. Takeoff MXR has an impressive ear shape and size. Get an early Takeoff with this variety in fresh markets. Tolerant to HPPD/ALS.
★ 03124	Icon XR	72	26"	8 x 1.9"	16 - 18	R	-	MS	FM	****	Icon has exceptional eating quality and is part of IFSI's Reserve quality class. Excellent husk protection, ear length, and tip fill under stress. A perfect choice for high quality fresh markets and roadside stands. A yellow version of Signature XR. Tolerant to HPPD/ALS.
03031	Xtra Tender 1572	72	20"	7 1/2 - 8 x 1.9"	16 - 18	M	-	MS	FM, S	***	Very good eating quality with dark green husk package and excellent flags. Overall high quality hybrid for roadside or shipping. Yellow version of Anthem.

CORN YELLOW SH2 Extra Sweet & Improved Super Sweets						
	Price per 1,000 seeds (M)	2.5M	10M	25M	100M	500M*
03124 Icon XR <small>Cruiser</small>		14.10	13.35	12.90	12.45	12.35
03223 Takeoff MXR <small>Cruiser</small>		14.05	13.30	12.85	12.40	12.30
03031 Xtra Tender 1572 <small>Cruiser</small>		14.00	13.25	12.80	12.35	12.25

* Multiple packages may be used to fill orders for these quantities.



SAVE WITH CASH DISCOUNTS

Cash discounts are available throughout the season and are a great way to add money to your bottom line.
See page 130 for all of the details.

November	.....7%
December	.....6%
January	.....5%
February	.....4%
March	.....3%
April	.....2%

CORN		ORNAMENTAL POPCORN	
	Days	Features	
06010 Firecracker	95	A miniature variety with a red stalk and good cold soil emergence. Plants are tall and strong with good tip cover and very little shank. High yields of 5" ears which can be used for both ornamental and popping purposes. Stalks are approximately 7.5 feet tall.	
06006 Little Indian	100	A popular variety with 4 - 5" multi-colored ears. Also very tender eating.	
06005 Strawberry	100	A popular variety with strawberry shaped ears for either decoration or popping.	

CORN ORNAMENTAL POPCORN

	Priced per package 4 oz.				
	Priced per pound in these package sizes				
	1#	5#	25#	50#	
06010 Firecracker	8.50	23.25	15.50	15.25	15.00
06006 Little Indian	8.75	23.85	15.90	15.65	15.40
06005 Strawberry	6.75	18.40	12.25	12.00	11.75



R98114W pg. 45

POPCORN

EATING QUALITY

No popcorn varieties are hullless. Eating quality is a measurement of flavor, kernel tenderness and hulls that are thin and break and disperse during popping. Thicker hulled hybrids retain the hull in the popped product and tend to remain in your teeth after eating. Factors influencing popcorn quality include kernel moisture and expansion ratio, processing procedures, home storage and handling. Good popcorn should provide at least 98% popped kernels with well under 2% unpopped kernels. Proper care at the processing level helps to assure this.

EATING QUALITY RATING

Good to Poor

EXPANSION

Refers to the increase in volume of unpopped corn after it is popped. To illustrate, if a given volume of unpopped corn expanded to a 40 rating when popped, the volume increase was 40 times. All data is collected on the standard test popper.

LODGING

The percentage of stalks broken below the ear at harvest time.

MUSHROOM SHAPE

The popped shape that is the most desirable for manufacturing caramel corn etc. due to tougher more durable shape after popping. Always less desirable as eating corn.

YIELD

Pounds of shelled corn adjusted to 13.5% moisture.

STORAGE

To maintain the best quality popcorn, store at 13 - 14.5% moisture content.

ORDERS
OVER \$350
ARE SHIPPED
FREE!



AMERICAN WAY



EARTH TONES



FIESTA



INDIAN ART
RED FIRE

CORN		POPCORN								
▲		Color	Days	Lodging	Yield per Acre	Expansion	Eating Quality	Mushroom	Features	
Commercial Varieties										
06039	R98114W ^{F1}	White	105	2%	5000 lbs. +	45	Good	0	An excellent eating-quality white popcorn that yields as well as many yellow hybrids. Strong stalks and roots help resist lodging. It provides high resistance to common rust and intermediate resistance to Goss' Wilt.	
06040	R997 ^{F1}	Yellow	105	2%	5000 lbs. +	46	Good	0	A mid-season butterfly popcorn. It has long cylinder - shaped ears with easy shelling large, orange kernels and improved stalk strength. It provides high resistance to Grey Leaf Spot and intermediate resistance to Common Rust, Northern Corn Leaf Blight, and Drought.	
06027	Ruby Red ^{F1}	Red	100	5%		38	Good	0	A true breeding, glossy burgundy red hybrid with no white kernels. Has stalk strength, yield and expansion equal to the best white hybrids. One of the best eating popcorns.	
06026	Shaman's Blue ^{F1}	Dark Blue	105	5%		43	Good	0	Dark blue popcorn hybrid. Has glossy dark blue kernels, large 8" ears, high expanding, and tender flakes. Good stalk strength.	

CORN		ORNAMENTAL CORN	
		Days	Features
05535	American Way	115	A very large eared 10 - 13" variety that has become popular with fresh market growers.
05536	Earth Tones	105	Has marvelous shades of blue and green as well as traditional reds and oranges. Can be ground into cornmeal.
05507	Fiesta	100	A variety developed by the University of New Hampshire. Early maturing with 8" ears and kernels that are variegated and of many colors.
05101	Indian Art Red Fire ^{F1}	105	Newest release in the "Indian Art" series. Comprehensive hybrid red stalk and red husk package. Kernels are deeper red when compared to Bloody Butcher. 8 - 10" ear.

See page 43 for Ornamental Popcorn
See page 66 for Ornamental Sorghum / Broomcorn

CORN ORNAMENTAL CORN		M=1,000 seeds				
Priced per package 4 oz.						
Priced per pound in these package sizes		1#	5#	25#	50#*	
05535	American Way	6.45	25.20	16.80	16.55	16.30
05536U	Earth Tones ^{Untreated}	7.50	29.25	19.50	19.25	19.00
05507	Fiesta	5.00	19.45	12.95	12.70	12.45
05101	Indian Art Red Fire	8.05	31.45	20.95	20.70	20.45

CORN POPCORN		M=1,000 seeds			
Price per 1,000 seeds (M)		2.5M	10M	25M	100M
Commercial Varieties					
06039	R98114W ^{White}	5.10	4.60	4.35	4.10
06040	R997 ^{Yellow}	4.95	4.45	4.20	3.95
06027	Ruby Red	10.30	9.80	9.55	9.30
06026	Shaman's Blue	9.40	8.90	8.65	8.40

* Multiple packages may be used to fill orders for these quantities.



RACEWAY **NEW** pg. 48

CUCUMBERS

PLANTING

Direct seed $\frac{1}{2}$ " - 1" soils with 60°F+ temperatures. Row spacing should range from 30" - 36" apart. Space plants 12" apart in the row.

See "Germination Chart" on page 125 for additional information on germination rate and days to germination at various soil temperatures.

MANAGEMENT

Scout fields weekly to make sure weed, insect, and disease pressure are kept in check.

HARVEST

Harvest every other day. Slicing cucumbers should be picked when diameter is approximately 2". Cucumbers should be approximately 7 - 8" long and have a smooth surface. Pickling cucumbers should be 3" long by 1" wide when ready to pick.

STORAGE

Store at 50 - 55° F and 90 - 95% humidity to ensure long shelf life.

DISEASE CODES

A - Anthracnose
ALS - Angular Leaf Spot
Cca - Corynespora Cassicola
Ccu - Cladosporium Cucumerium
CMV - Cucumber Mosaic Virus
CVYV - Cucumber Vein Yellowing Virus
DM - Downy Mildew
PM - Powdery Mildew
PRSV - Papaya Ringspot Virus
S - Cucumber Scab
TLS - Target Leaf Spot
WMV - Watermelon Mosaic Virus
ZYMV - Zucchini Yellow Mosaic Virus

COLOR CODES

DG - Dark Green
G - Green
MG - Medium Green
MDG - Medium Dark Green
VDG - Very Dark Green
W - White

HABIT TERMS

GY - Gynoecious
Refers to all female sex expression when grown under ideal environmental conditions. Various stresses can cause more male flowers.

MO - Monoecious
Refers to sex expression; having both male and female flowers on the same plant.

P - Parthenocarpic
Refers to the tendency of a plant to set fruit without pollination.

PF - Predominately Female
Refers to the blossoms produced by the plant as predominately female.



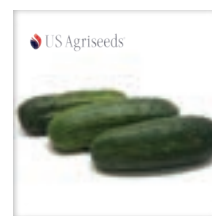
CORINTO




CITADEL







EUREKA ★



SUPREMO

CUCUMBERS		PROTECTED CULTURE Parthenocarpic 				
▲		Season	Plant	Length	Color	Disease Features
23576	Corinto ^{F1}	Spring /Autumn	Vigorous	8 - 10"	DG	CMV, CVYV, PM <i>A very consistent dark green, cylindrical protective culture cucumber with a very low cull rate. Produces tight sets on a compact plant with excellent shelf life both on and off the plant.</i>

CUCUMBERS		PICKLING						Pricing on page 47
▲		Days	Habit	Plant	L/D Ratio	Color: Spine-Fruit	Disease	Features
23005	Citadel ^{F1} 	50	GY	Medium	3.1	W-DG	A, ALS, CMV, DM, PM, S	<i>Industry-leading disease package includes intermediate resistance to Downy Mildew. Excellent option for machine harvest due to concentrated fruit set.</i>
★ 23014	Eureka ^{F1} 	53	MO	Compact	3.1	W-DG	A, ALS, CMV, PM, PRSV, S, WMV	<i>A monoecious hybrid with unique disease tolerances. Compare with your current favorite.</i>
23003	Supremo ^{F1} 	43	MO	Vigorous	3	W-DG	A, ALS, CMV, PM, PRSV, S, WMV, ZYMV	<i>High quality dark green fruit with thick skin and a small seed cavity. Ideal for processing or fresh market. Can be staked or on the ground.</i>
23025	Vlasstar ^{F1} 	52	P	Vigorous	3	W-MDG	A, ALS, CMV, PM, S	<i>A medium dark, blocky pickle that picks over a sustained multiple harvest.</i>

CUCUMBERS PROTECTED CULTURE			
	Priced per package	100 Seeds	500 Seeds 1000 Seeds
23576 Corinto		37.30	124.30 207.15

CUCUMBERS PICKLING		M=1,000 seeds				
	Priced per package	100 Seeds				
	Price per 1,000 seeds (M)		1M	5M	15M	75M*
23005 Citadel ^{F1400}	3.20	11.55	9.80	8.80	8.05	
23014 Eureka ^{F1400}	3.80	17.40	15.65	14.65	13.90	
23003 Supremo ^{F1400}	3.80	17.70	15.95	14.95	14.20	
23025 Vlasstar ^{F1400}	9.80	8.05	7.05	6.30		

* Multiple packages may be used to fill orders for these quantities.

GROWER PREFERRED ALL-STARS ★ CUCUMBERS

PICKLING

Still continuing to rise, **Eureka** remains our #1 pickling variety, both in the number of customers that purchase and amount of seed sold. Eureka's high disease package and ideal length to diameter ratio provide an ideal product for grower and consumer alike. For tried and true, use Eureka.

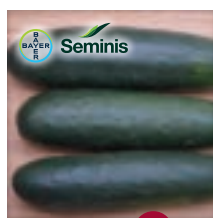
SLICER

Bristol is an exciting up and coming downy mildew tolerant slicing hybrid. Bristol yields a high percentage of fancy grade fruit due to plant health from multi-virus tolerance and the latest commercial strain of downy mildew tolerance. Use Bristol in late season plantings when downy mildew pressure is the highest.

Remaining strong, with the highest percentage of purchasing customers in the slicing cucumber section, is **Darlington**. Plant health and fruit quality are two of Darlington's greatest assets. While some varieties wilt under disease pressure like downy mildew, Darlington seems to power through due to its vigorous plant. Darlington is a proven variety.

Pete Dinius
Product Development





BRICKYARD **NEW**



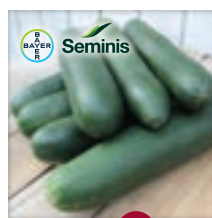
BRISTOL ★



COBRA



DARLINGTON ★



RACEWAY **NEW**

LIKE US ON
FACEBOOK

www.facebook.com/ruppseedsinc/



CUCUMBERS

SLICERS

		Days	Habit	Plant	L/D Ratio	Color	Disease	Features
NEW	23502 Brickyard ^{F1}	50	GY	Vigorous	8"	DG	A, ALS, CMV, DM, PM, PRSV, S, WMV, ZYMV	Brickyard is an early maturing variety which features a strong multi-virus resistance package that includes downy mildew resistance.
★	23512 Bristol ^{F1}	54	GY	Moderately Vigorous	8 1/4 x 2 1/4"	DG	A, ALS, CMV, DM, PM, PRSV, S, ZYMV	Early maturing, second generation hybrid with intermediate resistance to downy mildew plus multi-virus tolerance that delivers an improved disease package when compared to SV3462CS and SV4719CS. High number of fancy fruit that allows the grower to potentially experience higher marketable yields.
	23004 Cobra ^{F1}	60	GY	Vigorous	9.5 x 2"	DG	A, ALS, CMV, PM, PRSV, S, WMV, ZYMV	Productive hybrid with an excellent disease package and outstanding fruit quality. Can be used on open ground or plastic production. Holds its length well even during periods of stress.
★	23568 Darlington ^{F1}	62	GY	Vigorous	8 - 9 x 2"	DG	A, ALS, CMV, PM, PRSV, S, TLS, WMV, ZYMV	A Seminis multi-virus tolerant variety that holds up well under foliar disease pressure. Consistent yield of select fruit that are straight and have excellent color. Maintains optimum length under Northeast conditions.
NEW	23505 Raceway ^{F1}	54	GY	Vigorous	8 1/2"	DG	A, ALS, CMV, DM, PM, PRSV, S, WMV, ZYMV	Raceway is a dark green, uniform color on vigorous vines. With a high multi-virus resistance package Raceway will work good for late season planting. Raceway will maintain its length where heat stress might be a factor.

CUCUMBERS SLICERS

M=1,000 seeds

Priced per package		100 Seeds				
Price per 1,000 seeds (M)		1M	5M	15M	75M*	350M
23502	Brickyard ^{F1400}	19.10	17.60	16.60	15.85	14.85
23512	Bristol ^{F1400}	19.50	18.00	17.00	16.25	15.25
23004	Cobra ^{F1400}	21.60	20.10	19.10	18.35	17.35
23568	Darlington ^{F1400}	7.45	27.05	25.55	24.55	23.80
23505	Raceway ^{F1400}	19.50	18.00	17.00	16.25	15.25

* Multiple packages may be used to fill orders for these quantities.



The early-season insect protection offered by FarMore Technology can prevent or eliminate damage caused by cucumber beetles.

www.ruppseeds.com/fi400



FarMore[®] treated items are highlighted in green in the price tables. Look for this symbol in the product description tables marking FarMore treated items.



FAIRY TALE



GAUDI



HANSEL



NADIA



WHITE STAR

EGGPLANT					
▲	Days	Plant Size	Fruit Shape	Color	Features
24505 Epic ^{F1}	64	36"	Oval	Purple Black	Commercial grower variety. Resistant to Tobacco Mosaic Virus.
24526 Fairy Tale ^{F1}	50	18 - 24"	Slender	Lavender	An AAS winner. Fruit are bright lavender, up to 5" long, good to eat, on a dwarf plant. Can be grown in pots, planters or on your patio.
24502 Gaudi ^{F1}	80	30 - 36"	Obovate	Deep Purple, Black	Gaudi has long oval shaped fruit with a bright green calyx. Usually the calyx is spineless, but under certain conditions a few small spines can develop. The fruit is firm and is grown on a medium-tall, upright strong growing bush. The variety can be grown indoor and outdoor with good results.
24525 Hansel ^{F1}	55	18"	Slender	Purple	AAS winning Japanese eggplant from Seminis. Fruit are dark glossy purple, born in finger-like clusters and have a bright green calyx. Yields are much higher than similar sized Little Fingers.
24524 Nadia ^{F1}	70	24 - 30"	Oval Long	Black	An attractive purple black hybrid from Vilmorin. Fruit are 9" long by 4½" around. Colors early, sets under cool conditions with a durable plant for frequent pickings.
24521 Night Shadow ^{F1}	75	35"	Teardrop	Glossy Black	A Seminis hybrid with fruit that are large teardrop in shape; dark glossy black with a good blossom end scar.
24516 Santana ^{F1}	80	30"	Elongated Oval	Glossy Black Purple	A high yielding hybrid from Syngenta that performs where it matters most; yield, size and quality! One of the best for heat tolerance without fruit fading problems. Has reduced spines to prevent fruit scar.
24510 White Star ^{F1}	75	30 - 36"	Teardrop	White	Classic tapered teardrop shape. Creamy white fruit are smooth when mature. Approximately 5 to 7 inches in length with a diameter of 2 inches at top and 3.5 to 4 inches at bottom.

ENDIVE / ESCAROLE		CHICORY	
▲		Days	Features
Endive - narrow, finely cut, curly leaves			
25010	Tres Fine Maraichere	45	A finely cut, lovely green and very fine baby endive with outstanding flavor for the truly French gourmet salads. A petite, fern-like mound.

EGGPLANT		M=1,000 seeds			
Priced per package		500 Seeds			
Price per 1,000 seeds (M)		1M	5M	25M	100M
24505 Epic	7.70	12.25	11.15	10.75	10.20
24526 Fairy Tale	43.70	69.90	68.80	68.40	67.85
24502 Gaudi	18.70	29.90	28.80	28.40	27.85
24525 Hansel	43.70	69.90	68.80	68.40	67.85
24524 Nadia	16.90	27.00	25.90	25.50	24.95
24521 Night Shadow	9.65	15.40	14.30	13.90	13.35
24516 Santana	11.35	18.10	17.00	16.60	16.05
24510 White Star	10.00	16.00	14.90	14.50	13.95

ENDIVE / ESCAROLE CHICORY		M=1,000 seeds		
Priced per 1,000 seeds in these package sizes		10M	100M	400M
25010U Tres Fine Maraichere	Untreated	0.55	0.50	0.40



GIZMO  pg. 52

GOURDS

PLANTING

Direct seed in soils that are above 70° F. Plant gourds ½" - 1" deep. For a general rule of thumb, plant seed the depth of three times the thickness of the seed. Plant spacing varies depending on fruit size. For small and miniature gourds plant at approximately 5 - 10 sq. ft. per plant. For large gourds plant them at 30 sq. ft. per plant.

See "Germination Chart" on page 125 for additional information on germination rate and days to germination at various soil temperatures.

MANAGEMENT

Scout fields every 7 days to ensure crop health. Look for insect, weed, and disease pressure. The first three weeks focus on weeds and insect pressure. Then focus on disease pressure. For weed, insect, and disease identification and treatments consult the Midwest Vegetable Production Guide: www.ruppseeds.com/MVPG or your local extension. Place pollinators in field to ensure maximum fruit set.

HARVEST

Harvest when fruit have developed deep vibrant color or when plants start to die down. Clean gourds of dirt, then dip them in a 5% chlorine solution to ensure long shelf life.

STORAGE

Place gourds in a dry place that will have good air circulation to prevent rotting.



BIRDHOUSE
MARTINHOUSE



LARGE SPECKLED
APPLE



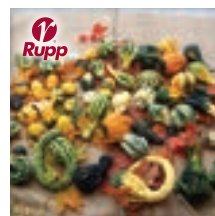
SPECKLED SWAN



AUTUMN WINGS
LARGE SWAN







AUTUMN WINGS
MEDIUM



AUTUMN WINGS
BLEND

GOURDS		LAGENARIA SICERARIA	
		Days	Features
26034	Birdhouse Martinhouse	100	A purified strain of the original birdhouse gourd. 10" diameter by 15" tall. Tan, smooth and hard shelled.
26002	Bushel	120	12 - 18" diameter with fruit weighing from 30 - 100 lbs. Excellent for arts and crafts when cured.
26035	Extra Long Handled Dipper	120	A dipper gourd with a 3 - 4' long handle. Grow on trellis for straight gourds.
26033	Large Speckled Apple	120	A large true apple shaped gourd 4 - 5" in diameter and 6 - 7" tall. Great for table decorations.
26025	Miniature Bottle	100	A miniature sized bottle gourd, 2" in diameter by 4" long.
26004	Mixed Large Types	100 - 130	A new mix of large types that are favorites of Rupp growers including; Birdhouse Martinhouse, Calabash, Extra Long Handled Dipper, Large Bottle, Large Speckled Apple and Speckled Swan.
26027	Speckled Swan	100	A large, crookneck gourd whose tip looks like a swan's head; 14 - 18" long with a 6" base.

GOURDS		PEPO		Pricing on page 52
		Days	Features	
26501	Autumn Wings Large Swan 	100	A unique gourd of many colors with wings, warts, and the fruit shape of a swan gourd. Its bulb size is 2 1/2 or 3" in diameter with a neck up to 12" long. A grand addition to our other fancy ornamental selections for the ornamental trade.	
26502	Autumn Wings Medium 	100	A unique gourd of many colors with the fruit shape of a spoon but with wings. Its bulb size is 2 1/2 or 3" in diameter with a neck up to 6" long. A grand addition to our other fancy ornamental selections for the ornamental trade.	
26503	Autumn Wings Small 	100	A unique gourd of many colors with wings and fruit shape of a swan pear. Its bulb size is 2 1/2 or 3" in diameter with a neck up to 4 - 5" long. Has great potential for the shipper if the wings can be protected from breakage.	
26510	Autumn Wings Blend 	100	A blend of 50% Autumn Wings Small, 25% Autumn Wings Medium, and 25% Autumn Wings Large.	

Additional Gourd descriptions and pricing can be found on the next page -->.



The early-season insect protection offered by FarMore Technology can prevent or eliminate damage caused by cucumber beetles. Additionally, the insecticide component has shown a remarkable ability to improve plant vigor and growth under certain environmental conditions. This patented vigor effect leads to more advanced crop development and superior performance that is especially important when pumpkin crops are under stress. www.ruppseeds.com/fi400



FarMore[®] treated items are highlighted in the green in the price tables.

Look for this symbol in the product description tables marking FarMore treated items.

GOURDS LAGENARIA SICERARIA

Priced per package		1 oz.	4 oz.				
Priced per pound in these package sizes				1#	5#	25#	Seeds /lb.
26034	Birdhouse Martinhouse	9.95	23.35	66.20	65.20	64.20	3,500
26034U	Birdhouse Martinhouse <small>Untreated</small>	9.95	23.35	66.20	65.20	64.20	3,500
26002U	Bushel <small>Untreated**</small>	13.70	32.20	91.25	90.25	89.25	1,800
26035	Extra Long Handled Dipper	10.30	24.20	68.65	67.65	66.65	4,500
26033	Large Speckled Apple	11.50	26.95	76.35	75.35	74.35	2,400
26025	Miniature Bottle	11.35	26.65	75.50	74.50	73.50	5,000
26004	Mixed Large Types	11.95	28.05	79.45	78.45	77.45	2,400
26027	Speckled Swan	10.30	24.20	68.65	67.65	66.65	2,200
** 15 seeds for \$5.00							



GALAXY OF STARS



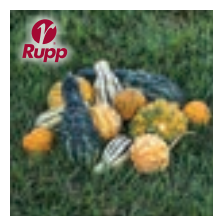
GIZMO



HOARGARTH










LUNCH LADY



RUPP FANCY
WARDER



RUPP SMALL
FORMULA BLEND

GOURDS		PEPO	
		Days	Features
26042	Galaxy of Stars 	90 - 100	An exciting Rupp hybrid gourd mixture in the shape of a 5 point star in many colors that can be mechanically washed. A unique gourd for table decorations.
 26009	Gizmo 	90 - 100	A Rupp winged gourd mix, which is unique for its bush plant type, offers fruit with rich colors including dark green, orange, yellow, light green, and white. This hard-shelled variety yields fruit that are 3 - 5" tall by 6 - 8" wide at the tip of the wings. Is sure to be another great addition to your fall decoration lineup.
 26012	Hoargarth 	90	A distinctive orange and dark green gourd that will add texture to your fall displays. The wart covered fruit are 7" wide by 5" high and grow on an intermediate bush plant.
26043	Lunch Lady	110	A one-of-a-kind large warted gourd. It produces an array of shapes & colors with fruit sizes from 3-10 lbs, all hard shells with warts.
26026	Rupp Fancy Warded 	100	A mixture of warted gourds with shapes like spoons, pears, and rounds; all warted and very colorful. Very limited supply - call for availability.
26005	Rupp Small Formula Blend 	90 - 100	A blend of fancy small types with a few plain varieties. Includes Shenot Crown of Thorns, Rupp Fancy Warded and Small Spoon. Very limited supply - call for availability.

GOURDS PEPO		M=1,000 seeds					
Priced per package		250 Seeds					
Price per 1,000 seeds (M)		1M	5M	25M	55M	Seeds /lb.	
26501	Autumn Wings Large Swan	9.65	27.45	26.45	25.45	24.45	7,300
26501	Autumn Wings Large Swan ^{FI400}	11.85	33.75	32.75	31.75	30.75	7,300
26501U	Autumn Wings Large Swan ^{Untreated}	9.65	27.45	26.45	25.45	24.45	7,300
26502	Autumn Wings Medium	9.65	27.45	26.45	25.45	24.45	8,000
26502	Autumn Wings Medium ^{FI400}	11.85	33.75	32.75	31.75	30.75	8,000
26502U	Autumn Wings Medium ^{Untreated}	9.65	27.45	26.45	25.45	24.45	8,000
26503	Autumn Wings Small	9.65	27.45	26.45	25.45	24.45	7,800
26503	Autumn Wings Small ^{FI400}	11.85	33.75	32.75	31.75	30.75	7,800
26503U	Autumn Wings Small ^{Untreated}	9.65	27.45	26.45	25.45	24.45	7,800
26510	Autumn Wings Blend	9.65	27.45	26.45	25.45	24.45	8,000
26510	Autumn Wings Blend ^{FI400}	11.85	33.75	32.75	31.75	30.75	8,000
26042	Galaxy of Stars	31.25	89.25	88.25	87.25	86.25	10,000
26042	Galaxy of Stars ^{FI400}	33.45	95.55	94.55	93.55	92.55	10,000
26042U	Galaxy of Stars ^{Untreated}	31.25	89.25	88.25	87.25	86.25	10,000

GOURDS PEPO		M=1,000 seeds					
Priced per package		250 Seeds					
Price per 1,000 seeds (M)		1M	5M	25M	55M	Seeds /lb.	
26009	Gizmo ^{FI400}	38.95	111.25	110.25	109.25	108.25	6,600
26012	Hoargarth ^{FI400}	37.65	107.55	106.55	105.55	104.55	3,500
26026	Rupp Fancy Warded	4.90	13.95	12.95	11.95	10.95	9,400
26026	Rupp Fancy Warded ^{FI400}	7.10	20.25	19.25	18.25	17.25	9,400
26026U	Rupp Fancy Warded ^{Untreated}	4.90	13.95	12.95	11.95	10.95	9,400
26005	Rupp Small Formula Blend	3.85	10.90	9.90	8.90	7.90	9,300
26005	Rupp Small Formula Blend ^{FI400}	6.05	17.20	16.20	15.20	14.20	9,300

GOURDS PEPO		M=1,000 seeds					
Priced per package		1 oz.	4 oz.				
Priced per pound in these package sizes				1#	5#	25#	Seeds /lb.
26043	Lunch Lady	21.05	49.50	144.40	141.40	138.40	3,300



ELEONORA



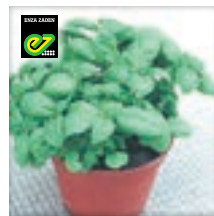
EMILY



EVERLEAF EMERALD
TOWERS



EVERLEAF
GENOVESE



GENOVESER



STARO

HERBS		Pricing on page 55	
		Annual / Perennial	Features
Basil			
27003	Eleonora	A	Intermediate resistance to downy mildew. Big, lightly serrated leaves. For open field and in pots.
27035	Emily	A	A compact Genovese type basil with medium to large leaves. Because of improved shelf life Emily is recommended for summer production and year round in hot climates; works well in the field or greenhouse. Excellent performance against Fusarium.
27019	Everleaf Emerald Towers	A	Flowers up to 10 to 12 weeks later than standard basil. Well-branched variety with dark green, glossy foliage and short internodes. Makes a beautiful towering plant with huge harvest potential that stays tidy for many uses, including in-ground, container gardens and hydroponics. Traditional Genovese flavor is perfect for eating fresh in caprese salad or chopped fresh in recipes.
27006	Everleaf Genovese	A	The first basil bred for season-long performance and continual harvesting. Flowers up to 8 weeks later than standard basil. Compact, highly branched plant perfect for in-ground and potted plant production. Robust Genovese flavor, perfect for pesto and other sauces. Intermediate resistance to downy mildew and resistant to Fusarium.
27033	Genoveser	A	A special, high yielding strain, dark green, cup shaped selection, glossy leaf, recommended for field production.
27012	Italian Large Leaf	A	Leaves are broad, oval and crinkly with spicy flavor. Used in perfumes, Italian seasonings, and soups.
27017	Lemon	A	Pleasing citrus aroma, excellent in vinegars or with fish.
27018	Purple	A	Has a plant with intense purple leaves used for ornamental plantings and seasonings.
27030	Siam Queen	A	An improved cultivar of ornamental and aromatic Thai basil. Has 3" leaves, distinctive purple stems, and is an eye-catching addition with flowers for an edible landscape accent. Has an exotic flavor.
Catnip			
27509	Catnip	P	A vigorous growing mint loved by cats. Grayish green leaves have a strong mint-like flavor.
Chervil			
27005	Chervil	A	The fine cut, deep green leaves look like a delicate, lacy version of parsley. Flavor is a mild anise/parsley and goes well with fish, seafood, eggs or in salads. At its best fresh from the garden.
Chives			
27514	Staro	P	Extra thick, dark green leaved variety for all growing purposes. Excellent for forcing and pot growing as well as field production.
Coriander / Cilantro			
27002	Calypso	A	British bred coriander has excellent bolting resistance and can be cut back and allowed to re-grow at least 3 times throughout the summer due to its extremely low growing point. This quick growing annual herb is best grown for its delicious foliage that can be added to salads, curries and soups.
Dill			
27007	Bouquet	A	A development from Mammoth Dill. Used in pickles and salad dressings. Adds zest to salads, soups, and vegetables.
27516	Green Sleeves	A	A very stable, fast growing, medium fine leafed variety of dark green dill for production of fresh bundles. Strong bolt resistance. 2 - 2 ½ feet tall.

Additional Herbs can be found on the next page --->.



GREEN SLEEVES



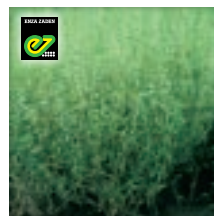
OREGANO
VULGARE



GIGANTE D'ITALIA



SAGE



SUMMER SAVORY

HERBS

Pricing on page 55

		Annual / Perennial	Features
Lavender			
27502	Lavender <small>Vera</small>	P	Great for dried flowers, perfuming linens, and repelling moths. Hardy.
Oregano			
27503	Oregano <small>Vulgare</small>	P	Purple flowered. Seasons tomato sauces, fish, salad dressings and pizza.
Parsley additional Parsley on page 67			
35012	Gigante d'Italia	A	A plain, dark green, large leaf sized variety; very aromatic and high yielding with multiple cuts.
Peppermint			
27504	Peppermint	P	Leaves used as mint tea and as a meat garnish. In addition, the mint oil has many other uses.
Rosemary			
27505	Rosemary	P	Leaves are used in seasoning meats, sauces, and wonderful for potpourri.
Sage			
27506	Sage	P	Most widely used herb. Seasons poultry, sausage, etc.
Summer Savory			
27011	Summer Savory	A	Fresh or dried, used as seasonings in gravies and stews.
Thyme			
27508	German Winter	P	Excellent seasoning for soups, i.e. clam chowder, as well as poultry, stews, sauces, pickles and salads.



SAVE WITH CASH DISCOUNTS

Cash discounts are available throughout the season and are a great way to add money to your bottom line.
See page 130 for all of the details.

November	7%
December	6%
January	5%
February	4%
March	3%
April	2%

**ORDERS
OVER \$350
ARE SHIPPED
FREE!**

HERBS FOR THE PROFESSIONAL

M=1,000 seeds

Price per package/pound	1/4 oz	1 oz.	4 oz.	1#	5#	25#
Basil						
Italian Large Leaf						
27012U Untreated	2.75	3.75	10.60	28.25	27.25	26.25
27017U Lemon <small>Untreated</small>	3.20	10.20	29.95	79.75	78.75	
27018U Purple <small>Untreated</small>	3.40	10.85	31.90	85.00	84.00	
27030U Siam Queen <small>Thai Untreated</small>	7.00	22.25	65.35	174.25	173.25	
Price per 1,000 seeds (M)						
	1M	5M	25M	100M		
27003 Eleonora	3.60	2.10	0.85	0.35		
27035 Emily	3.60	2.10	0.85	0.35		
Everleaf Emerald Towers						
27019	22.95	21.45	20.20	19.70		
27006 Everleaf Genovese	22.95	21.45	20.20	19.70		
27033 Genoveser	3.55	2.05	0.80	0.30		

HERBS FOR THE PROFESSIONAL

M=1,000 seeds

Price per package/pound	1/4 oz	1 oz.	4 oz.	1#	5#	25#
Catnip						
27509U Catnip <small>Untreated</small>	2.35	7.40	21.70	57.75		
Chervil						
27005U Chervil <small>Untreated</small>		3.50	8.50	22.55	21.55	
Chives						
27514 Staro	3.65	2.15	0.90	0.40		
Coriander / Cilantro						
27002U Calypso <small>Untreated</small>		3.00	4.10	10.70	9.70	8.70
Dill						
27007U Bouquet <small>Untreated</small>		3.50	6.85	18.15	17.15	16.15
Price per 1,000 seeds (M)						
	1M	5M	25M	100M		
27516 Green Sleeves	3.50	2.00	0.75	0.25		
Price per package/pound						
	1/4 oz	1 oz.	4 oz.	1#	5#	25#
Lavender						
27502U Lavender <small>Vera Untreated</small>	7.65	24.45	71.85	191.60	190.60	
Oregano						
27503U Oregano <small>Vulgare Untreated</small>	7.05	22.45	66.00	176.00	175.00	
Parsley						
35012 Gigante d'Italia		5.25	7.25	20.65	19.65	18.65
Peppermint						
27504U Peppermint <small>Untreated</small>	19.10	61.00	179.35	478.25	477.25	
Rosemary						
27505U Rosemary <small>Untreated</small>	31.45	100.55	295.70	788.50	787.50	
Sage						
27506U Sage <small>Untreated</small>		12.90	37.55	100.10	99.10	
Summer Savory						
27011U Summer Savory <small>Untreated</small>		4.40	12.55	33.45	32.45	
Price per 1,000 seeds (M)						
	1M	5M	25M	100M		
Thyme						
27508U German Winter <small>Untreated</small>	3.55	2.05	0.80	0.30		



BLACK MAGIC pg. 57

KALE

PLANTING

Plant rows 2' - 3' apart with plants 8" - 16" apart. Seeding rate should be approximately 2 to 4 pounds per acre. Preplant fertilizer should be 60 pounds per acre of nitrogen, 0 - 60 pounds of phosphorus, and 0 - 200 pounds of potassium per acre depending on soil test results.

See "Germination Chart" on page 125 for additional information on germination rate and days to germination at various soil temperatures.

MANAGEMENT

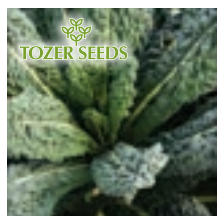
Sidedress 30 - 60 pounds of nitrogen after transplants are established. Use crop rotation to help combat disease pressure. Scout fields for disease, mildew, and insects.

HARVEST

Kale can be harvested three ways: whole plant, bunched leaves, or "stripped" leaves. "Stripped" kale is pre-packaged for fresh market in all methods; yellow or damaged leaves must be removed before packing.

STORAGE

Leafy greens can be stored close to 32°F. At this temperature, they can be held for 10 - 14 days.



BLACK MAGIC



BLUE RIDGE



KOLIBRI



QUICKSTAR



CASH DISCOUNTS

Cash discounts are available throughout the season and are a great way to add money to your bottom line. See page 130 for all of the details.

KALE			
		Height	Features
Fresh Market			
28005	Black Magic	12 - 14"	Winter hardy Tuscan type with darker, savoyed leaves than conventional kales. Flavor improves with frost. Harvest early to use baby leaf as a savoyed brassica. Mature leaves grow as a rosette rather than on a true stem.
28504	Blue Ridge ^{F1}	12 - 14"	A superior quality kale that is slow to bolt and yields a highly frilled leaf suitable for both processing or fresh market bunching.
28503	Winterbor ^{F1}	18 - 24"	A Vates Blue Curled type with tall stems that allow easier stripping.
Heritage Varieties			
28004	Red Russian	24 - 36"	The most tender, mild flavored kale variety. Will wilt soon after harvest; should be cooled or consumed promptly.

KOHLRABI			
		Days	Features
Fresh Market			
29002	Kolibri ^{F1}	45	Prettiest, most uniform purple variety available. 3" bulb with deep purple skin and crisp white flesh.
29004	Quickstar ^{F1}	49	A Sakata variety that is slow to bolt. Slightly broad dark green leaves. Extremely uniform fruit.

KALE		M=1,000 seeds			
Price per 1,000 seeds (M)		1M	5M	25M	100M
28005	Black Magic	3.85	2.80	2.05	1.55
28504	Blue Ridge	10.45	9.40	8.65	8.15
28503	Winterbor	10.50	9.45	8.70	8.20
Priced per package		4 oz.			
Priced per pound					
in these package sizes			1#	5#	25#
28004U	Red Russian ^{Untreated}	15.25	33.85	33.35	33.10

KOHLRABI		M=1,000 seeds			
Price per 1,000 seeds (M)		1M	5M	25M	100M
29002	Kolibri	19.15	18.60	18.10	17.60
29004	Quickstar	9.15	8.60	8.10	7.60



TADORNA

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ALKINDUS



BARILLA



MERIDIAN

LEEK

	Days	Features
30908 Tadorna	100	An Enza variety that grows upright with a long white shaft and dark blue green foliage. Excellent quality for fall harvest, but can be over wintered where moderate winter conditions prevail. Good field holding ability and very easy to clean.

LETTUCE

	Features
Butterhead	
30309 Alkindus Red	A mid-sized variety with beautiful dark red color which is suitable for full season production.
30504 Barilla Green	A medium to dark green, thick-leaved lettuce with a strong base and good volume. It is strong against internal tipburn and appropriate for late spring and early autumn crops.
Iceberg	
30705 Meridian Green	Meridian is a pioneer! This variety is first to market with Fusarium Race 1 tolerance and offers the best tolerance commercially available in the iceberg category. Has performed well in trials in the Midwest and NE.
30704 Somerset Green	A new summer Iceberg producing a flat round head with smooth ribs and great head protection. Somerset has good tolerance to tipburn and bolting.
Leaf	
30304 Bergam's Green Green	A non-heading, dark green variety.
30016 New Red Fire Red	The premier red lettuce for market growers. Superior appearance. Mosaic indexed.
30013 Red Mist Red & Green	Early variety with nice color contrast between red and green and high bolting tolerance. Also has moderate cold tolerance and strong tolerance to heat. Harvest summer to fall. Adapted for all major lettuce growing regions.
Romaine	
30214 Breen Red	A unique variety due to its brilliant purple-red exterior color and the interior green color. Top closes nicely, resulting in a perfect formed heart. Great tasting with excellent shelf life.
NEW 30215 Teton Green	Taller and darker plant for spring and fall harvest. Early maturing and produces large and heavy heads.
Romaine Heart	
30203 Arroyo Green	A commercial introduction suitable for carton, fresh market and heart production. Shiny dark green. Broad seasonal adaptability.



SOMERSET



BERGAM'S GREEN



NEW RED FIRE



RED MIST



BREEN



TETON **NEW**

LEEK

M=1,000 seeds

	Price per 1,000 seeds (M)	1M	10M	100M	500M*
30908P Tadorna Pelleted		6.15	5.90	5.70	5.55

* Multiple packages may be used to fill orders for these quantities.

LETTUCE

M=1,000 seeds

	Price per 1,000 seeds (M)	5M	100M	500M
Butterhead				
30309P Alkindus Primed/Pelleted		6.35	6.00	5.75
30504P Barilla Pelleted		4.35	4.00	3.75
Iceberg				
30705P Meridian Pelleted		3.25	2.90	2.65
30704P Somerset Pelleted		3.15	2.80	2.55
Leaf				
30304P Bergam's Green Primed/Pelleted		2.55	2.20	1.95
30016P New Red Fire Pelleted		2.45	2.10	1.85
30016 New Red Fire		1.40	1.05	0.80
30013P Red Mist Pelleted		3.10	2.75	2.50
Romaine				
30214P Breen Pelleted		6.35	6.00	5.75
30215P Teton Pelleted		3.00	2.65	2.40
Romaine Heart				
30203P Arroyo Pelleted		2.90	2.55	2.30



APHRODITE ★ pg. 61

MELONS

PLANTING

When direct seeding plant $\frac{1}{2}$ " - 1" deep. Soil temperature should be 75 - 85°F. Five to six feet is the recommended row spacing with 18 - 24 inches between plants. If starting with transplants sow 3 - 5 weeks prior to planting outside.

See "Germination Chart" on page 125 for additional information on germination rate and days to germination at various soil temperatures.

MANAGEMENT

To ensure high yield place pollinators near fields. A melon needs to be visited by a bee three times to ensure proper pollination. Scout every seven days for weed, insect, and disease pressure. Contact your local extension agent or consult the Midwest Vegetable Production Guide for identification and treatment options. www.ruppseeds.com/MVPG

HARVEST

Harvest 30 - 35 days after pollination. If shipping, pick at half slip. When picking for fresh market, pick at $\frac{3}{4}$ to full slip. Wash fruit in peroxyacetic acid (peroxide and acetic acid), as a non-chlorine sanitizing option.

STORAGE

Cool to at least 70°F and at 95% humidity. Shelf life is based on storage temperature. Do not cool below 32°F.

DISEASE CODES

A - Anthracnose
DM - Downy Mildew
F - Fusarium
GSB - Gummy Stem Blight
PM - Powdery Mildew
PRSV - Papaya Ring Spot Virus
WMV - Watermelon Mosaic Virus
ZYMV - Zucchini Yellow Mosaic Virus



AFTERGLOW ★



APHRODITE ★



ATHENA ★



AVATAR ★



CLEOPATRA ★



SUGAR RUSH

MELONS		CANTALOUPE Hybrid						Pricing on page 62
		Days	Fruit Size pounds	Net / Sutures	Flesh Color	Disease	Harvest Indicator	Features
31015	Accolade	73	6	Medium Net / Light Sutures	Orange	F ^{0,1,2} , PM	Full Slip	Improved internal fruit quality for extended shelf life. Enhanced vine strength. Tight seed cavity with firm flesh.
★ 31017	Afterglow	78	5 - 7	Medium Net / Deep Green Sutures	Orange	F ^{0,1,2} , PM ^{1,2}	Full Slip	Late sutured melon with high Brix and firm flesh for extended holdability.
★ 31071	Aphrodite	75	6 - 8	Coarse Net / Light Sutures	Salmon	F ^{0,1,2} , PM ^{1,2}	Full Slip	Today's standard for Eastern shipping melons. Larger and better holding ability than the former standard, Athena.
31016	Astound	75	6	Medium Net / Light Sutures	Orange	F ^{0,1,2} , PM	Full Slip	Another new Syngenta release with improved flesh firmness. Very similar to Accolade while maturing approximately 2 days later.
★ 31050	Athena	80	5 - 7	Medium Net / Light Sutures	Salmon	F ^{0,1,2} , PM ^{1,2}	Full Slip	Athena delivers the sweet flavor and texture consumers demand. Athena melons stay firm even when harvested at full slip.
★ 31084	Avatar	75	7 - 9	Full Net	Orange	F ^{0,1,2} , PM ^{1,2}	Full Slip	Large Eastern shipper with medium open cavity. Firm, flavorful orange flesh. Exterior is light green and turns to a yellow-tan when fully ripe. Ideal for higher latitudes.
★ 31014	Cleopatra	70	4 - 6	Medium Net / Light Sutures	Orange	F ^{0,1,2} , PM ^{1,2}	Full Slip	Consistent early fruit set. Tight seed cavity and great quality for an early variety. Suitable for local delivery, roadside stands and fresh market. Great as a first early or to plant with Goddess.
31075	Goddess	68	5 - 6	Medium Net / Light Sutures	Orange	F ^{0,1,2} , PM ^{1,2}	Full Slip	An extremely early Athena type with good disease tolerance and good holding ability.
31085	Solstice	78	7 - 12	Heavy Net / Deep Sutures	Orange	F ^{0,1,2} , PM ^{1,2}	Full Slip	A Seneca Vegetable Research release similar to old "Eastern" types. Has great sugar, flavor and yield. Very large fruit. Great disease package.
31018	Sugar Rush	75	4	Medium Net / No Sutures	Orange	F ^{0,1,2} , PM ^{1,2}	Full Slip	Quality meets size. This is the big brother to Sugar Cube. Productive plant and high Brix.

GROWER PREFERRED ALL-STARS ★ MELONS

These melons continue to be the top performing varieties for growers. If you are looking to add melons to your operation you can't go wrong with these All-Stars.

CANTALOUPE

Afterglow is an extremely dependable half Tuscan melon with high sugars and firm flesh. Afterglow will keep your customers coming back for more.

The most widely grown melon in the North and Midwest is **Aphrodite**. It is still the standard for many of our growers. This melon yields with the best of them.

Athena is the most widely grown melon in the Eastern U.S. With its excellent disease tolerance and sought after quality, it is well known in the marketplace.

Flavor, size and yield have combined to make **Avatar** a favorite of many of our growers. For those of you who are looking for a large eastern type melon, this is one to try.

Cleopatra is similar to the popular Goddess variety with much better netting and a more consistent size. Include this 70 day melon in your program.

PERSONAL SIZED

If you are looking for a personal sized hybrid, look no further than **Sugar Cube**, with perhaps the best eating quality of any melon on the market (high Brix, firm flesh, great flavor). Sample this one at your market and it will sell itself. It is also just the right size for smaller households or the CSA box. This melon slips easily and will hold and ship without losing quality. The perfect personal sized melon!

Brad Paulson
Vegetable Consultant

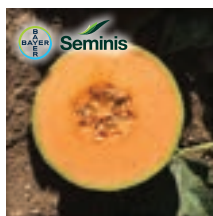




ARANGINA **NEW**



INFINITE GOLD



SUN BLUSHED



THUNDERSTRUCK



TIRRENO



SUGAR CUBE ★

MELONS

CANTALOUPE Hybrid Extended/Long Shelf Life

Pricing on page 62

		Days	Fruit Size pounds	Net / Sutures	Flesh Color	Disease	Harvest Indicator	Features
NEW	31022 Arangina	75	3 - 6	Course Net / Deep Green Sutures	Dark Orange	F ^{0,1,2} , PM ^{1,2,3,5,5}	Clip	Arangina is a delicious mid-season ESL Italian melon. Strong plant vigor with good and uniform fruit setting. The fruit is blocky shaped, hard course netting, deep green sutures, dark orange flesh with great firmness and small cavity. Outstanding eating quality. Harvest indicator is when rind changes colors.
	31020 Damaris	78 - 80	5 - 6	Medium Net / No Sutures	Orange	F ⁰ , PM ^{2,3,5}	Half Slip	Damaris is an oval-shaped, extended shelf life melon with a solid disease package. Features a tight cavity with firm flesh.
	31006 Infinite Gold	84	5 - 7	Heavy Net / No Sutures	Deep Orange	F ^{1,2} , PM ²	Clip	This melon has been bred for strong performance and long shelf life, without sacrificing great flavor and fruit quality. Offers strong vines, high yield potential, uniform size and shape.
	31009 Shockwave	85	4 - 6	Medium Net / No Sutures	Deep Orange	F ^{0,1,2} , PM ^{1,2}	Half Slip	Outstanding eating quality with an average Brix of 15%. Has firm flesh with a very small seed cavity. This melon has an extended holdability for a controlled pick. Slips when mature.
	31019 Sun Blushed	82	4 - 6	Heavy Net / Light Sutures	Deep Orange	F ^{0,1} , PM	Clip	Extended shelf life (ESL) western type hybrid with excellent flavor. Firm and attractive flesh with extremely high Brix.
	31021 Thunderstruck	80	5 - 7	Medium Net / No Sutures	Deep Orange	F ^{0,1,2} , PM ^{1,2}	Half Slip	Enhanced holding ability with Eastern flavor and texture. It is best to monitor background color change before full slip to determine optimum harvest time. Great sugar levels.
	31083 Tirreno	83	4 - 6	Medium Net / Deep Green Sutures	Orange	F ^{1,2,5} , PM ^{1,2,3}	Half Slip	Possesses beautiful firm flesh and offers excellent holding ability. Also has shown tremendous plant health in the field for excellent yield potential. Very good eating quality.

Harvest Indicator (Slip): Slip is defined as a small crack that forms around the stem. Typically, when harvesting a cantaloupe and consuming it within a few days a **full slip** melon is your best choice, but the shelf life is limited. If you desire to pick less often and store the cantaloupe in a cooler, you might want to consider a **half slip** melon. You will still get good flavor, good sugar, and a firm texture. The third stage would be **clipping**. At this stage, the brix's have fully developed and fruit are firm and soften as they are stored. A clipped melon does not mean it is of lower quality.

MELONS CANTALOUPE Hybrid

M=1,000 seeds


	Priced per package	100 Seeds	500 Seeds				
	Price per 1,000 seeds (M)			1M	5M	15M*	90M*
31015 Accolade ^{F300}		18.75	73.70	105.25	102.15	100.15	99.15
31017 Afterglow		13.00	51.10	72.95	69.85	67.85	66.85
31071 Aphrodite ^{F300}		16.80	65.95	94.15	91.05	89.05	88.05
31022 Arangina		Call for Current Pricing					
31016 Astound ^{F300}		18.40	72.25	103.15	100.05	98.05	97.05
31050 Athena ^{F300}		17.15	67.35	96.20	93.10	91.10	90.10
31084 Avatar ^{F300}		12.55	49.35	70.50	67.40	65.40	64.40
31014 Cleopatra		13.00	51.10	72.95	69.85	67.85	66.85
31020 Damaris ^{F300}		18.25	71.70	102.40	99.30	97.30	96.30

MELONS CANTALOUPE Hybrid

M=1,000 seeds

	Priced per package	100 Seeds	500 Seeds				
	Price per 1,000 seeds (M)			1M	5M	15M*	90M*
31075 Goddess		12.60	49.60	70.80	67.70	65.70	64.70
31006 Infinite Gold ^{F300}		21.75	85.55	122.15	119.05	117.05	116.05
31009 Shockwave		15.30	60.15	85.90	82.80	80.80	79.80
31085 Solstice		13.10	51.45	73.45	70.35	68.35	67.35
31018 Sugar Rush		14.70	57.80	82.55	79.45	77.45	76.45
31019 Sun Blushed		14.20	55.75	79.60	76.50	74.50	73.50
31021 Thunderstruck		14.70	57.80	82.55	79.45	77.45	76.45
31083 Tirreno		23.60	92.90	132.65	129.55	127.55	126.55

* Multiple packages may be used to fill orders for these quantities.

MELONS		MIXED/SPECIALTY Hybrid					
		Days	Fruit Size pounds	Net / Sutures	Flesh Color	Disease	Features
31704	Ambassador	76	6 - 8	Heavy Net / Slight Sutures	Ivory / Green	F ^{0,1,2} , PM ^{1,2}	Larger than other galia melons with high Brix and enhanced fruit firmness for excellent storage ability. Ideal for main season when great tasting melons are desired.
31011	Earli-Dew 	85	3 - 4	No Net / No Sutures	Lime Green	F	Early Honeydew type. Slips when mature.
31717	Gourmet	70	3 - 4	Distinctive Netting	Creamy White		A high sugar (15 brix) melon from Hollar. Great flavor, texture and yield make this one an excellent choice for roadside marketers.

MELONS		PERSONAL SIZE Hybrid					
		Days	Fruit Size pounds	Net / Sutures	Flesh Color	Disease	Features
★ 31078	Sugar Cube	80	2	Medium Net / Light Sutures	Deep Orange	F ^{0,1,2} , PM ^{1,2} , PRSV, WMV, ZYMV	A personal size melon with deep orange flesh, amazing quality (14% Brix), with excellent shelf life. In addition, has the best disease resistance package. Fruit size is around 4".

MUSTARD			
		Days	Features
Fresh Market			
32005	Savannah <small>F1 Mustard Spinach</small>	35	An early maturing, broadleaf, tendergreen mustard. Faster growing and slower bolting than OP's.

OKRA							
		Days	Features				
33003	Dwarf Long Green Pod	55	2 - 3' tall plant with dark green, tender pods.				

MELONS MIXED/SPECIALTY Hybrid		M=1,000 seeds				
		100 Seeds	500 Seeds	1M	5M	15M*
Priced per package						
Price per 1,000 seeds (M)						
31704	Ambassador	13.55	53.65	76.60	73.50	71.50
31011	Earli-Dew <small>F300</small>	14.45	57.25	81.75	78.65	76.65
31717	Gourmet	15.75	62.50	89.25	86.15	84.15

* Multiple packages may be used to fill orders for these quantities.

MUSTARD		4 oz.			
		1#	5#	50#	
Priced per package					
Price per pound in these package sizes					
32005	Savannah	64.35	114.35	113.35	112.35

MELONS PERSONAL SIZE Hybrid		M=1,000 seeds				
		100 Seeds	500 Seeds	1M	5M	15M*
Priced per package						
Price per 1,000 seeds (M)						
31078	Sugar Cube	14.40	57.10	81.55	78.45	76.45

* Multiple packages may be used to fill orders for these quantities.

OKRA		1 oz.		4 oz.	
		1#	5#	1#	5#
Priced per package					
Price per pound in these package sizes					
33003U	Dwarf Long Green Pod <small>Untreated</small>	6.35	9.70	9.45	

ONIONS

PLANTING

Onions are mostly direct seeded in the field, although some are transplanted as seedlings or sets. Transplants are sometimes used to improve bulb size, as well as to hasten maturity, or to avoid infection by some plant diseases, but this method of crop establishment is more expensive. Planting occurs from late March through early May. Between-row spacing varies considerably depending upon weed and foliar disease management, seeder capability, and harvesting equipment. In-row spacing also varies depending upon variety, desired bulb size, between row spacing, soil type, and other management considerations.

Bunching Onions - Direct seed in spring when the soil reaches 50°F. Plant seed ¼" deep and approximately ½" apart.

Bulb Onions/Short Day - Typically short day onions are direct seeded in the southern region of the United States. In order to grow short day onions in the northern region of the United States, the seed has to be sown in greenhouses and then transplanted into the field. Use pelleted seed if direct seeding to help achieve better singulation.

Bulb Onions/Intermediate Day - Direct seed intermediate day onions as soon as soil allows in April or early May. Sow seed 2" apart and thin to 3 - 4" apart for larger onions. Seeding depth should be approximately ¼" deep. If

transplanting seed in flats in late February to mid March, tops may be clipped to 5" tall. Use pelleted seed if direct seeding to help achieve better singulation.

Bulb Onions/Long Day - Direct seed long day onions as soon as soil allows in April or early May. Sow seed 2" apart and thin to 3 - 4" apart for larger onions. Seeding depth should be approximately ¼" deep. If transplanting seed in flats in late February to mid March, tops may be clipped to 5" tall. Use pelleted seed if direct seeding to help achieve better singulation. Plant long day onions in the northern latitudes.

See "Germination Chart" on page 125 for additional information on germination rate and days to germination at various soil temperatures.

MANAGEMENT

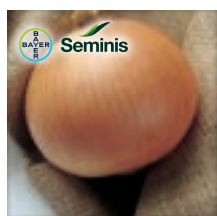
Keep onions well weeded with shallow cultivation. Onions are shallow rooted and grow best in moist soil; irrigation may be required. Keep direct seeded onions away from onion sets because onion sets are more prone to disease. Long day onions should be planted in northern latitudes because of daylight requirements for bulbing.

HARVEST

Onions are ready to harvest when tops approximately have 50 - 75% fallen over and the skins have dried. Pull the bulbs by hand or use equipment such as a potato digger or under-cutter to cut the roots and lift the bulbs. Wait until all the leaves are dead and dry. It is likely the outer skins will loosen. Pulling onions too green will make them difficult to cure and will affect storing them. Harvest when the weather is dry.

STORAGE

Cure onions at 65 - 85°F at 70% humidity. Curing decreases the incidence of neck rot, reduces water loss during storage, prevents microbial infection, and is desirable for development of good scale color. Curing can be done in the field, preferably when the weather is warm and dry. If it rains let them dry fully before handling. A greenhouse or hoop house also provides good conditions for curing. Temperatures in the 80's will enhance the bronze color in the skins. Sunshine is good as long as it is not too hot. Extreme sun can produce sunscald. Store onions out of the sun; exposure to light after curing will induce greening of outer scales. Optimum temperature for long term storage of onions is 32°F with 65 - 70% humidity. It is important to cool them down slowly. Using cool late summer and fall temperatures works great to cool onions down slowly.



CANDY



GREAT WESTERN



GREAT WHITE



RED CANYON



SPANISH
MEDALLION



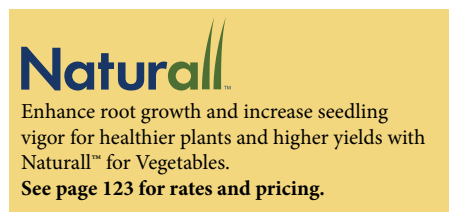
GENESIS



RED DEFENDER



SV4643NT



ISHIKURA IMPROVED
BUNCHING



RED BUNCHING

ONIONS						Pricing on page 66
		Maturity	Color	Bulb Shape	Storage	Features
Bulb Onions / Intermediate Day						
34020	Candy ^{F1}	100	Yellow	Globe	Short	A mild flavored Seminis onion that will perform well when plants are transplanted for extra large to jumbo sizes. Short term storage only.
34004	Great Western ^{F1}	110	Yellow	Globe	Short	Can be grown in all intermediate growing areas. Has good firmness with good skin retention. It will cut a high percentage of single centers and can be direct seeded or transplanted. This variety has strong plant growth with sizes that range from colossal to jumbo.
34021	Great White ^{F1}	103	White	Globe	Medium	A White Spanish Class onion. Great yield potential for its maturity. Has attractive, luminescent white package with a high rate of single centers.
34016	Red Canyon ^{F1}	100	Red	Globe	Medium	Red Canyon is an early choice for intermediates. It has a solid and consistent globe shape and a bold red color. Dependable yields with a high percentage of single centers containing distinct red rings.
34039	Spanish Medallion ^{F1}	115	Yellow	Globe	Short	This Sweet Spanish type yellow onion is firm with excellent skin retention. It is globe to tall globe shape and jumbo to colossal in size. It is tolerant to pink root and fusarium basal rot.
Bulb Onions / Long Day						
34051	Genesis ^{F1}	100	Yellow	Globe	Medium	An early maturing hybrid that produces uniform globe shaped bulbs with golden brown coloring. Boasts good tolerance to both pink root and fusarium.
34045	Red Defender ^{F1}	125	Red	Globe	Long	Very dark red interior and exterior with uniform bulbs. Good for transplanting.
34000	SV4643NT ^{F1}	112	Red	Flattened Globe	Long	Bold red colored variety with excellent yield potential. Has both superb interior and exterior color. Stores very well.
Bunching Onions						
34510	Ishikura Improved Bunching	120	White			A Tokyo Long type with fancy, lengthy, white stalks. A good shipper.
34036	Red Bunching ^{F1 DPS 3047}	55	Red			A red skinned, white fleshed bunching onion with an attractive deep color. This onion makes a striking presentation in the market.



BROOM CORN
SORGHUM BLEND



SAVE WITH CASH DISCOUNTS

Cash discounts are available throughout the season and are a great way to add money to your bottom line.
See page 130 for all of the details.

November	7%
December	6%
January	5%
February	4%
March	3%
April	2%

**ORDERS
OVER \$350
ARE SHIPPED
FREE!**

ORNAMENTAL		SORGHUM / BROOMCORN	
		Days	Features
05538	Broom Corn Sorghum Blend	100-110	<i>This seed is a combination of our Mixed Color Broom Corn and the Colored Uprights Sorghum seeds. Seed head colors vary from either gold, bronze, red, brown, burgundy or black. Maturities vary from 100-110 days. As the seed heads matures, the color will deepen and become heavier and shiny.</i>

ONIONS		Descriptions on page 65. M=1,000 seeds		
	Price per 1,000 seeds (M)	5M	25M	100M
34020 Candy ^{F300}		5.05	4.20	3.10
34020P Candy ^{F300 Pelleted}		5.80	4.80	3.55
34051U Genesis ^{Untreated}		3.90	3.25	2.40
34004 Great Western		6.00	5.00	3.70
34021P Great White ^{F300 Pelleted}		8.50	7.05	5.20
34036 Red Bunching ^{DPS 3047}		7.75	6.45	4.75
34016P Red Canyon ^{F300 Pelleted}		8.00	6.65	4.90
34045 Red Defender		5.40	4.50	3.30
34039P Spanish Medallion ^{Pelleted}		6.70	5.55	4.10
34000 SV4643NT ^{F300}		6.70	5.55	4.10
Priced per package		1 oz.	4 oz.	1#
34510 Ishikura Improved Bunching		6.00	15.80	39.40

ORNAMENTAL SORGHUM / BROOMCORN				
	Priced per package	4 oz.		
	Priced per pound in these package sizes		1#	5#
05538U Broom Corn Sorghum Blend ^{Untreated}		16.10	46.25	43.60



FarMore F300, an advanced fungicide seed treatment technology, delivers protection for a variety of small-seeded vegetable crops against a broad spectrum of seed and seedling diseases. With the active ingredients mefenoxam (Apron XL[®]), fludioxonil (Maxim[®] 4FS) and azoxystrobin (Dynasty[®]), FarMore F300 enhances seedling emergence, plant stand establishment, plant health, early-season vigor and yield potential. www.ruppseeds.com/f300



FarMore[®] treated items are highlighted in green in the price tables.
Look for this symbol in the product description tables marking FarMore treated items.

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Naturall

VEGETABLE ROOT INOCULANT

Naturall™ for Vegetables contains proprietary and patent pending biologicals that colonize the root system of plants. Crop stress such as disease and dry weather can be alleviated, and often systemically, so that root colonization by this treatment can affect the physiology of the whole plant resulting in higher yields. See page 123 for application rates and pricing.

PARSLEY		
▲	Days	Features
35012 Gigante d'Italia	75	A plain, dark green, large leaf sized variety; very aromatic and high yielding with multiple cuts.

PARSNIPS		
▲	Days	Features
36005 Javelin ^{F1}	110	A hybrid developed in Europe for the pre-pack market with high marketable yield in the desired size range. Roots have level crowns and wash easily. Superior quality and marketability vs. OP varieties.

PARSLEY					
Priced per package		1 oz.	4 oz.		
Priced per pound in these package sizes				1#	5#
35012 Gigante d'Italia		5.25	7.25	20.65	18.65

PARSNIPS		M=1,000 seeds			
Price per 1,000 seeds (M)		5M	50M	100M	500M
36005P Javelin	Primed, Pelleted	5.45	4.90	4.65	4.30



PLS595  pg. 69

PEAS

PLANTING

Direct seed 1½" - 2" deep in soils that are at least 40° F. Plant in rows that are 30" - 36" apart and 1" - 2" between the plants.

See "Germination Chart" on page 125 for additional information on germination rate and days to germination at various soil temperatures.

MANAGEMENT

Scout field for insect, weed, and disease pressure.

HARVEST

Harvest peas when ripe. In shelling peas, pods should be filled out and able to feel individual peas. Pea pods should be harvested before seed develops inside the pod.

STORAGE

After harvest store peas at 50 - 60°F with 95% humidity to ensure quality.

DISEASE CODES

MV - Enation Mosaic Virus
F - Fusarium
NW - Near Wilt
PM - Powdery Mildew
RR - Root Rot
W - Common Wilt Race 1
WP - Western Pea Streak Virus
YM - Bean Yellow Mosaic

Naturall™ **VEGETABLE ROOT INOCULANT**
 Naturall™ for Vegetables contains proprietary and patent pending biologicals that colonize the root system of plants. Crop stress such as disease and dry weather can be alleviated, and often systemically, so that root colonization by this treatment can affect the physiology of the whole plant resulting in higher yields. See page 123 for application rates and pricing.

Order
 ONLINE
 @
 ruppseeds.com

PEAS							
		Days	Height	Pod Length	Peas per Pod	Disease	Features
<i>Fresh Market</i>							
12033	Legacy	67	26"	3 ½"	7 - 9	F, PM	A Bolero replacement, one day earlier with resistance to Powdery Mildew.
12003	Maestro	61	18"	4"	9	MV, PM, W, YM	CROP FAILURE Heavy crops, very disease resistant.
12008	PLS595	67	30"	3.6"	9 - 10	F, PM	Fresh market or processor. High yields. Great taste.
12035	Sabre	65	24"	3 ½"	9 - 10	F, RR, PM	CROP FAILURE Sabre is a normal vine type with long pods. The dark green berries produce wonderful yields - frozen, canned or fresh.

PEAS			SNOW PEA Flat Oriental				
		Days	Features				
12102	Oregon Sugar Pod II	68	30" vine with 4" pods, disease resistant.				

PEAS			SUGAR SNAP				
		Days	Features				
12206	Cascadia	67	A snap pea with unusually thick pod walls on a 30" vine. Pods remain tender and sweeter longer than other cultivars. Flavor improves until seeds are over mature. Has outstanding disease tolerance, eating quality and yielding ability.				
12201	Sugar Ann	60	Earliest and shortest snap pea. 18" vine. Can be shelled.				
12209	Sugar Sprint	62	A variety from Syngenta which replaces Sugar Ann. Has resistance to powdery mildew and tolerant to Pea Enation Mosaic Virus. 3" sweet and stringless pods with a plant height of 26".				

PEAS						
	Priced per pound in these package sizes					
	1#	5#	25#	50#*	500#*	
12033 Legacy	6.95	4.60	4.35	4.10	4.00	
12003 Maestro	Crop Failure					
12008 PLS595	7.05	4.65	4.40	4.15	4.05	
12035 Sabre	Crop Failure					

* Multiple packages may be used to fill orders for these quantities.

PEAS SUGAR SNAP						
	Priced per pound in these package sizes					
	1#	5#	25#	50#*	500#*	
12206 Cascadia	7.20	4.75	4.50	4.25	4.15	
12201 Sugar Ann	7.40	4.90	4.65	4.40	4.30	
12209 Sugar Sprint	8.65	5.70	5.45	5.20	5.10	

* Multiple packages may be used to fill orders for these quantities.

PEAS SNOW PEA						
	Priced per pound in these package sizes					
	1#	5#	25#	50#*	500#*	
12102 Oregon Sugar Pod II	7.50	4.95	4.70	4.45	4.35	

* Multiple packages may be used to fill orders for these quantities.



TURNPIKE ★ pg. 71

PEPPERS

PLANTING

Sow in the greenhouse 7 - 9 weeks before desired planting date. Allow plants to harden 7 days before transplanting. Plant transplants halfway between rootball and bottom leaves. This will help prevent lodging.

See "Germination Chart" on page 125 for additional information on germination rate and days to germination at various soil temperatures.

MANAGEMENT

Scout every 7 days to ensure crop development. Consult the Midwest Vegetable Production Guide:

www.ruppseeds.com/MVPG or your local extension agent for identification and treatments.

HARVEST

Cut or break pepper off the plant but leave at least 1" of the stem attached to the pepper.

STORAGE

Clean and wax peppers. Pre-cool at 45°F. Store at 45 - 50°F with 90 - 95% humidity; this will ensure the longest shelf life.

DISEASE CODES

BLS - Bacterial Leaf Spot
CMV - Cucumber Mosaic Virus
PHY - Phytophthora Root Rot
PMV - Pepper Mottle Virus
PVY - Potato Virus Y
S - Stip
TEV - Tobacco Etch Virus
TMV - Tobacco Mosaic Virus
TSW - Tomato Spotted Wilt

USE RECOMMENDATIONS

FM - Fresh Market
P - Processing
PP - Place Pack



ARISTOTLE X3R® ★



BAYONET



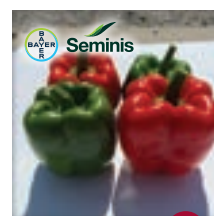
MERCER



PS09941819 X5R® ★



RED KNIGHT X3R®



REDFISH X10R® NEW



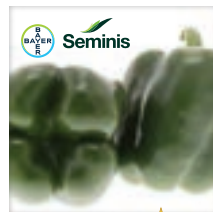
REGULATOR



SAILFISH X10R®



SPRINTER



TARPON X10R® ★



TURNPIKE X5R® ★

PEPPERS		BELL GREEN TO RED Hybrid				Pricing on page 72
		Days	Flesh	Disease	Use	Features
★	37125 Aristotle X3R®	72	Thick	BLS ^{1,2,3} , PVY, TMV	FM	A Seminis hybrid with heavy set, thick walls, excellent disease protection and enormous fruit size. 3 - 4 lobed. The industry standard.
	37001 Bayonet	72	Thick	BLS ^{1,2,3,4,5,7,8,9} , PHY, TMV	FM, PP	A Syngenta hybrid with large blocky fruit. Excellent fruit color, fruit firmness, shoulder appearance, fruit uniformity and wall thickness. High yield potential.
	37065 Mercer	72	Thick	BLS ^{0,3,7,8} , PHY, TMV	FM, PP, P	Mercer is a widely adapted green-to-red bell pepper well suited for the North Eastern U.S. growing regions. The maturity is mid-early, with high yields of extra-large fruit with good quality. Plants are vigorous, sturdy, have good cover and have high yield potential. The fruit are firm, dark green and mature to a very attractive deep red color.
★	37161 PS 09941819 X5R®	75	Thick	BLS ^{1,2,3,4,5} , PHY	FM	The largest sized pepper we carry. Produces a continuous set of large to extra-large, 3 and 4 lobed fruits on a small to medium sized plant. Fruits are anthocyaninless and appear to have good field tolerance for epidermal separation.
	37119 Red Knight X3R®	63	Thick	BLS ^{1,2,3} , PVY	P	A Seminis medium to large blocky hybrid. Early to red, like North Star, with resistance to BLS races 1, 2 and 3.
NEW	37048 Redfish X10R®	76	Thick	BLS ⁰⁻¹⁰ , PHY	FM	A widely adapted pepper that is well suited for the early red markets. Redfish has a strong vigorous plant with large fruit. Redfish has BLS 0-10 with phytophthora control.
	37047 Regulator	73 - 75	Thick	BLS ¹⁻¹⁰ , TMV	FM, PP	Regulator is an attractive, widely adaptable variety. This variety produces a high percentage of four lobed fruit and will maintain size throughout the growing season. The growing area for Regulator is the Eastern US, both in main season spring and fall. Regulator features a strong plant with good cover and a great fruit uniformity.
	37046 Sailfish X10R®	Early	Thick	BLS ⁰⁻¹⁰ , PHY, TMV	FM, P	An early red bell pepper for fresh market, with high-quality, blocky smooth fruit, and excellent red color.
	37014 Sprinter	Early	Medium Thick	TMV ⁰⁻³	FM, PP	Produces quality yields of uniform fruit over a long harvest window. Compact plants. It sets fruit well under row cover. Strong against blossom-end rot and russetting. Turns red early.
★	37042 Tarpon X10R®	Main	Thick	BLS ⁰⁻¹⁰ , PHY, TMV	FM, PP	Tarpon is a main-season hybrid with X10R® technology and intermediate resistance to Phytophthora blight for the northeast and midwest United States and eastern Canada. Tarpon has a compact plant and produces dark green, smooth blocky fruits.
★	37023 Turnpike X5R®	72	Thick	BLS ^{1,2,3,4,5,7,9} , PHY, TMV	FM	Extra large sized fruit with massively thick walls. Provides industry leading potential for yield.



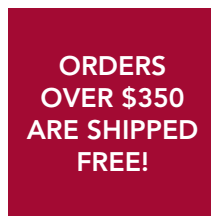
ABAY



DICAPRIO



SVPB8415 X10R ★



DELIRIO



MILENA

PEPPERS		BELL YELLOW Hybrid				
		Days	Flesh	Disease	Use	Features
37015	Abay	80	Medium Thick	BLS ¹⁻⁵	FM	Offers strong bacterial leaf spot resistance. Very strong plant with high yield potential. Outstanding coloration. Excellent firmness and fruit quality. Continuous setting.
37034	Dicaprio	80	Medium Thick	TMV ^{0,3} , TSW	FM	Good variety for high tunnels or unheated greenhouses from Enza Zaden.
37108	Early Sunsation ^{X3R®}	70	Thick	BLS ^{1,2,3} , PVY, TMV	FM	A Seminis hybrid with Bacterial Leaf Spot 1, 2 and 3 resistance. Is early with dark green blocky fruit turning golden and sweet at maturity. Maintains firmness in mature stage and has heat setting ability.
★ 37045	SVPB8415 ^{X10R®}	73 Green / 83 Yellow	Thick	BLS ^{1,2,3} , PVY, TMV	FM	Offers fast color change from green to yellow. Very adaptable across many growing conditions in the eastern U.S.

PEPPERS BELL GREEN TO RED Hybrid		M=1,000 seeds				
Priced per package		100 Seeds	500 Seeds			
Price per 1,000 seeds (M)				1M	5M	25M 50M
37125	Aristotle ^{X3R® F300}	17.80	78.65	112.30	103.95	99.00 95.15
37125P	Aristotle ^{X3R® F300 Pelleted}	18.05	79.65	113.75	105.30	100.25 96.35
37001	Bayonet	12.75	56.20	80.25		
37065	Mercer ^{F300}	16.65	73.60	105.10	97.30	92.65 89.05
PS 09941819						
37161	^{X5R® F300}	18.15	80.20	114.55	106.05	101.00 97.10
PS 09941819 ^{X5R®}						
37161P	^{F300 Pelleted}	18.40	81.20	116.00	107.40	102.25 98.30
37119	Red Knight ^{X3R®}	12.85	56.80	81.10	75.05	71.45 68.70
37048	Redfish	Call for Current Pricing				
37047	Regulator ^{with X10R®}	17.85	78.80	112.55	104.20	99.20 95.35
37046	Sailfish ^{with X10R®}	18.65	82.40	117.65	108.90	103.70 99.70
37014	Sprinter	57.60	254.75	363.90	336.90	320.85 308.50
37042P	Tarpon ^{X10R® F300 Pelleted}	19.90	88.00	125.65	116.30	110.75 106.45
37023	Turnpike ^{X5R®}	19.00	83.85	119.75	110.85	105.55 101.45

* Multiple packages may be used to fill orders for these quantities.

PEPPERS BELL YELLOW Hybrid		M=1,000 seeds				
Priced per package		100 Seeds	500 Seeds			
Price per 1,000 seeds (M)				1M	5M	25M 50M
37015	Abay	17.25	76.25	108.90	100.80	96.00 92.30
37034	Dicaprio	81.30	359.70	513.85	475.75	453.05 435.60
37108	Early Sunsation ^{X3R®}	12.60	55.75	79.60	73.70	70.15 67.45
37045	SVPB8415 ^{X10R®}	19.05	84.15	120.15	111.25	105.95 101.85

* Multiple packages may be used to fill orders for these quantities.

GROWER PREFERRED ALL-STARS ★ PEPPERS

GREEN TO RED BELLS

Aristotle X3R® is the best overall performer with a consistent early set of large sized fruit. A favorite with many growers – a real money-maker!

If you are concerned about Phytophthora pressure, consider using **Turnpike X5R®**. It has one of the strongest tolerances of any bell pepper that we carry and the fruit quality is exceptional. It also provides the grower with X5R bacterial leaf spot resistance.

PS09941819 X5R® is the one for you if your customers are looking for a jumbo sized bell! It also has a very dark green color and X5R Bacterial Leaf Spot resistance.

Tarpon is a blocky bell pepper with X10R resistance to Bacterial Leaf Spot and Intermediate Resistance to Phytophthora. You will like the consistent size, shape, and dark green color.

OTHER COLORED BELLS

SVPB8415 is a yellow X10R bell pepper from Seminis that you need to try for your colored bell pepper mix. It turns from green to yellow quickly and has very high quality large size fruit.

SWEET BANANAS

SV3782PP X3R® has fruit quality similar to Ethem but it also has resistance to bacterial spot races 0-3, 7 and 8. Fruits are 8" x 1 1/2" and very smooth.

ANCHO / POBLANO

Tiburon has the quality your customers expect in this category. Pungency levels are milder and will work very well in Mexican dishes. Tiburon is a poblano (turns red).

HOT WAX BANANA

Inferno is the best all-around hot banana available. The yield is fantastic and the pungency is just what your customers expect.






JALAPEÑO

Mammoth is the jalapeno you are looking for if you want consistent large fruit size and medium heat levels. Mammoth has a continuous fruit set so you can expect very good yields throughout the growing season.

A newer addition to our jalapeno lineup is **SV3198HJ X3R®**. It can be used for processing or fresh market. Fruits are long and cylindrical with pungency on the milder side at 1,000 Scovilles.

Dave Silveus
Vegetable Consultant



PEPPERS		BELL OTHER COLORS Hybrid					
▲		Days	Flesh		Disease	Use	Features
37083	Bianca	66	Thick		TMV ⁰	FM	Bianca means white in Italian. Larger and whiter than competitive varieties. Very early and slow coloring from white to light red. 3 - 4 lobed.
37090	Delirio	68	Thick		TMV ⁰	FM, PP	An early maturing, medium to large blocky, dark green to vivid bright orange, sweet bell pepper. Good holding quality.
37013	Milena 	Early	Thick		PVY, TMV ⁰⁻³ , TSW	FM, PP	Thick walls and uniform 3-4 lobed fruit. Peppers average ½ lb and 3” x 4” in size. Vigorous open plant habit with good yield and solid set, even under hot conditions. Plants average 28” tall and are upright and sturdy. Works well in the greenhouse, unheated tunnels or open field. Strong disease package.
37088	Tequila	68	Thick		TMV ⁰	FM	Larger and better quality than its other lilac competitors. Matures from lilac to a medium red color. 3 - 4 lobe.

PEPPERS BELL OTHER COLORS Hybrid			M=1,000 seeds			
Priced per package		100 Seeds	500 Seeds			
Price per 1,000 seeds (M)				1M	5M	25M 50M
37083	Bianca	20.60	91.15	130.20	120.55	114.80 110.35
37090	Delirio	18.65	82.35	117.60	108.85	103.65 99.65
37013	Milena	57.45	254.05	362.90	336.00	320.00 307.65
37088	Tequila	21.35	94.40	134.85	124.85	118.90 114.30

* Multiple packages may be used to fill orders for these quantities.



CORNITO ARANCIA



CORNITO GIALLO



CORNITO ROSSO



ORANOS



SWEETIE ORANGE



SWEETIE YELLOW

PEPPERS		MISCELLANEOUS SWEET Hybrid				
		Days	Flesh	Color	Shape	Disease Features
Super Sweet Cones						
37199	Cornito Arancia	80		Orange	1 ½ x 5"	A half-size Corno di Toro type pepper. Very early and attractive. Grow and sell them individually, or as mixed colors, loose or in a clamshell. Exceptionally sweet, perfect for grilling and roasting.
37195	Cornito Giallo	80		Yellow	1 ½ x 5"	A half-size Corno di Toro type pepper. Very early and attractive. Grow and sell them individually, or as mixed colors, loose or in a clamshell. Exceptionally sweet, perfect for grilling and roasting.
37198	Cornito Rosso	80		Red	1 ½ x 5"	A half-size Corno di Toro type pepper. Very early and attractive. Grow and sell them individually, or as mixed colors, loose or in a clamshell. Exceptionally sweet, perfect for grilling and roasting.
37179	Conical Blend	70	Medium	Red, Orange, Yellow	1 ½ x 5"	A multi-colored blend of the three conical peppers, orange, red and yellow. Only available in 100 seed packs.
37174	Oranos	70	Medium	Orange	1 ½ x 7"	TMV ⁰ The most outstanding orange conical hybrid available! A very early variety that produces vigorous plants with fruit that are especially appreciated for their unique flavor and product presentation. Sets well in the heat.
Miniature Sweet Cones - Snack Peppers						
37190	Sweetie Orange	70 from transplant	Thick	Orange	2 ½ - 3" long	These peppers are extremely sweet and the perfect size for snacking. Uniform fruit feature an open seed cavity. They grow great in both open field and protected culture.
37194	Sweetie Purple	70 from transplant	Thick	Purple	2 ½ - 3" long	
37191	Sweetie Red	70 from transplant	Thick	Red	2 ½ - 3" long	
37192	Sweetie Yellow	70 from transplant	Thick	Yellow	2 ½ - 3" long	
37193	Sweetie Blend	70 from transplant	Thick	Orange, Purple, Red, Yellow	2 ½ - 3" long	A multi-colored blend of the four Sweetie Peppers. Only available in 100 seed packs.

PEPPERS MISCELLANEOUS SWEET Hybrid		M=1,000 seeds				
Priced per package	100 Seeds	500 Seeds				
Price per 1,000 seeds (M)			1M	5M	25M	50M
Super Sweet Cones						
37199 Cornito Arancia	19.65	86.75	123.90	114.70	109.20	105.00
37195 Cornito Giallo	13.20	58.40	83.40	77.20	73.50	70.65
37198 Cornito Rosso	13.20	58.40	83.40	77.20	73.50	70.65
37179 Conical Blend	28.90					
37174 Oranos	41.45	183.40	262.00	242.55		

PEPPERS MISCELLANEOUS SWEET Hybrid		M=1,000 seeds				
Priced per package	100 Seeds	500 Seeds				
Price per 1,000 seeds (M)			1M	5M	25M	50M
Miniature Sweet Cones - Snack Peppers						
37190 Sweetie Orange	29.45	130.10	185.80	172.00	163.80	157.50
37194 Sweetie Purple	32.25	142.55	203.60	188.50	179.50	172.55
37191 Sweetie Red	29.45	130.10	185.80	172.00	163.80	157.50
37192 Sweetie Yellow	29.45	130.10	185.80	172.00	163.80	157.50
Sweetie Blend						
37193 Orange, Purple, Red, Yellow	35.65					

* Multiple packages may be used to fill orders for these quantities.



LOLA



SV3782PP X3R★



SAVE WITH CASH DISCOUNTS

Cash discounts are available throughout the season and are a great way to add money to your bottom line.

See page 130 for all of the details.

November	.....7%
December	.....6%
January	.....5%
February	.....4%
March	.....3%
April	.....2%

PEPPERS		MISCELLANEOUS Hybrid				
		Days	Flesh	Color	Disease	Features
Banana						
37038	Lola	60 - 65	Thick	Light Green to Red	BLS ^{0,3,7,8} , TSWV	Widely adapted variety well suited where bacterial leaf spot or TSWV are a concern. High yield potential of large and extra-large fruit. Plants are medium strong and vigorous with good cover.
★ 37082	SV3782PP X3R*	70	Thick	Light Yellow to Red	BLS ^{0,3,7,8}	AKA Sweet Sunset, this variety has won the AAS. Used for 2nd early in the processing industry.

PEPPERS MISCELLANEOUS Hybrid			M=1,000 seeds			
Priced per package	100 Seeds	500 Seeds				
Price per 1,000 seeds (M)			1M	5M	25M	50M
Banana						
37038 Lola	12.25	54.00	77.10	71.35	67.95	65.30
37082 SV3782PP ^{X3R*}	13.00	57.40	81.95	75.85	72.20	69.40
* Multiple packages may be used to fill orders for these quantities.						

* Multiple packages may be used to fill orders for these quantities.

- A
- B
- C
- E
- G
- H
- K
- L
- M
- O
- P
- R
- S
- T
- W



TIBURON ★ pg. 77

HOT PEPPER TYPES

ANAHEIM

(Hatch - New Mexican) chili. Fruit range from 4 - 12" long and 2" wide, green to red at maturity, but also may be yellow, orange to brown. Many different varieties abound. Range from sweet to hot. Use green as fresh, canned or frozen. Mature are usually dried and ground into chili powder or paprika if sweet. Also used in salsas.

ANCHO

(Poblano) The fruit are heart shaped, pointed, thin walled with an indented stem attachment. Immature fruit are dark green with mature fruit being either red or brown. Fruit are 3 - 4" long and about 2" wide and are mildly pungent. The pepper of choice to make chili rellenos.

CAYENNE

Mature red fruit are 5 - 10" long and wrinkled. Irregular in shape, highly pungent, often used as dried, ground powder. Also used fresh in salads, sauces and dishes.

CHERRY

Like the name suggests, round or slightly flattened, green to red, hot or sweet. Similar use to wax pepper.

CHINESE

(Habanero-Scotch Bonnet- Bahamian-Jamaican) In this species, diversity is enormous. Popular in Jamaica, Yucatan and Brazil. Very, very hot and persistent, but aromatic. Fruit are 1 - 2½" long and 1 - 2" wide. Green to variable mature colors of yellow, orange, red or white. Use dried as a spice, fresh or processed. Plant starts slower than most other pepper types.

GHOST

Subconical to conical shape measuring 2.5 to 3.5 inches in length. Approximately three times hotter than typical habaneros. Red is the most common color at maturity, with orange, yellow and chocolate as rarer varieties.

JALAPEÑO

Fruit are thick walled, conical shaped, dark green when immature turning red at maturity and most cultivars are highly pungent. Fruit may show cracking or corkiness which is a desirable trait in Mexico. Length vary widely. Use canned, pickled, salsas or fresh. When dried, by smoking, they are called chipotle.

ORNAMENTALS

Peppers classified as ornamentals do not carry a characteristic that makes them in-edible. They are individuals from the many groups previously listed that happen to have leaves and fruit that are particularly attractive and give them ornamental value.

PASILLA

Pod length is 6 - 12" long and 1 - 2" wide. Fruit color is dark green, turning brown at maturity. Usually dried before use in moles and salsas.

RED CHILI

Fruit are 2½" long by ½" wide, green when immature changing to red at maturity. Fruit have thin walls, taper to a point and are used for drying, processing and sauce. Hot!

SERRANO

Fruit are ½" wide and 2 - 3" long. Medium walls and shaped similar to Jalapeño and is the pepper of choice in Salsa Verde and other southwestern relishes.

THAI HOT

Green fruit to red at maturity, very hot, tiny 3/8" wide by 1" long fruit. Popular in oriental markets.

WAX

Yellow when immature, orange-red at maturity. Can be pungent or non-pungent. Vary from 2 - 8" long and about 2" wide. Use pickled or fresh in salads and relishes.



CHARGER



SPITFIRE



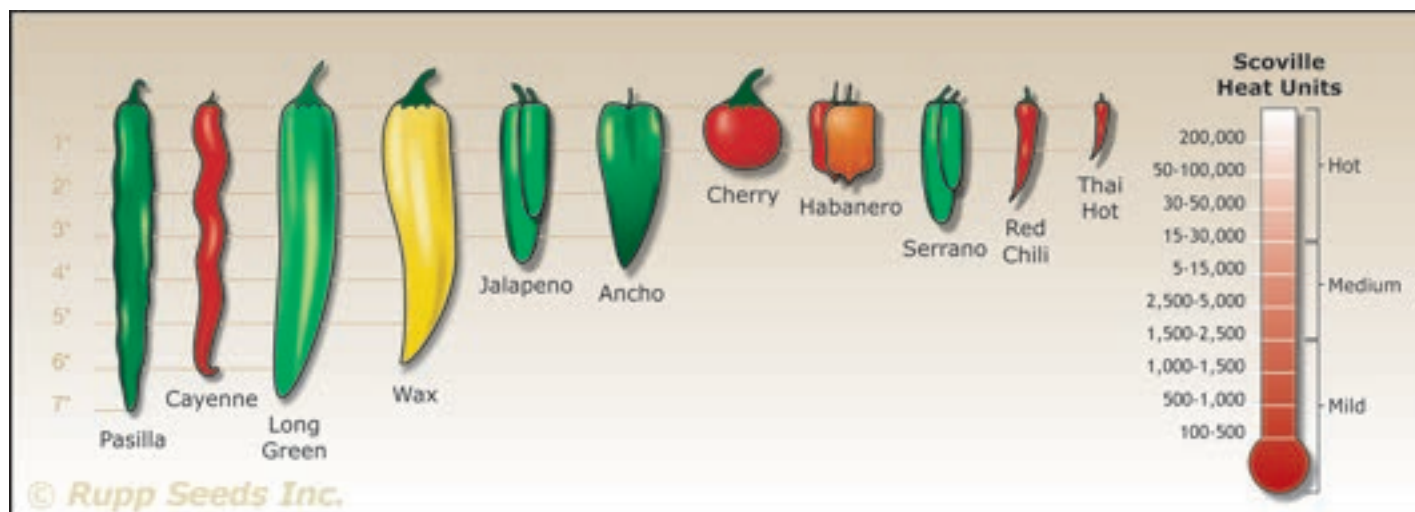
SARGENTO



TIBURON★



ARAPAHO



PEPPERS		HOT Hybrid					Pricing on pages 79	
		Days	Flesh	Color	Relative Scoville Rating	Disease	Use	Features
Anaheim								
37412	Charger	75	Thick	Green to Deep Red	1,000 to 2,000	TSW	FM	The leader in Anaheims with large, smooth, two lobed fruit. Vigorous, erect plant with excellent foliage cover protecting the fruit.
37462	Spitfire			Green to Red	90 to 130	PHY	FM	Only known Anaheim hybrid with phytophthora resistance. Large fruit size.
Ancho								
37457	Sargento	80-85	Thick	Glossy Dark Green to Red	350 to 1,750	PHY	FM	An extra-large fruited poblano (Ancho) with very good quality that is suited for multiple harvests. The fruit are mid-long tapering, firm, straight, and have a high percentage of two lobes. Intermediate resistance to phytophthora. Suited for the fresh and drying market.
★ 37455	Tiburon 🌊	73	Thick	Very Dark Green to Red	250 to 1,500		FM	A true poblano producing excellent yields of extra large fruit for stuffing (chile rellenos) or drying; continuous fruit set.
Cayenne								
37458	Arapaho <small>Cheyenne</small>	70	Thick	Light Green to Red	2,000 to 4,000		FM, P	A cayenne with large, long, narrow fruit. Produces high yields of early maturing fruit; compact plant. Medium pungency.

Additional Hot Peppers can be found on the next page -->.



BOMBITA



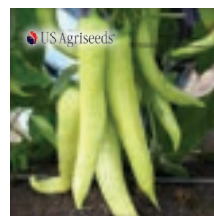
TIME BOMB



KABAL



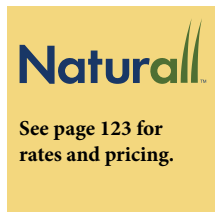
REY PAKAL



BLAZING BANANA



INFERNO ★

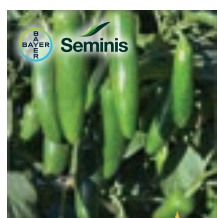


JEDI



MAMMOTH ★

PEPPERS		HOT Hybrid						Pricing on pages 79	
	▲	Days	Flesh	Color	Relative Scoville Rating	Disease	Use	Features	
Hot Cherry									
37467	Bombita	68		Green to Red			FM, P	Bombita is the perfect shape, 1.25-1.5" average, for pickling, stuffing and processing. Great tasting, hot, and easy to pick.	
37417	Time Bomb	65		Green to Red	1,000	TMV	FM, P	Produces red, hot cherry peppers with a light smoky flavor. Fruit is 1.6 x 1.6". Has light heat and are great pickled, processed or chopped into salsas.	
Habanero									
37423	Kabal	95	Thin	Green to Orange	300,000		FM	High yielding variety with a vigorous, healthy plant that has a continuous set throughout harvest. Fruit average 1.5 - 2 inches in length with typical habanero shape.	
37432	Rey Pakal	135	Thin	Green to Red	200,000	CMV	FM	Vigorous plant that provides for prolonged, high yielding harvests. Demonstrates the ability to reach full maturity with exposure to less than optimal heat units.	
Hot Wax									
37422	Blazing Banana	60 - 70	Thick	Yellow to Red	6,000 to 6,500	BLS ^{1,2,3}	FM, P	Outstanding early maturing variety that displays a strong branched plant with excellent fruit coverage. Fruit size of 9 x 1.75 - 2".	
★ 37408	Inferno	60 - 65	Medium	Yellow to Red	2,500 to 4,500		FM, P	A pendant, hot banana type for fresh market or pickling. Very productive and uniform.	
Jalapeño									
37476	Jedi	70-75	Thick	Dark Green	2,500 to 3,600	BLS ^{1,2,3}	FM, P	Jedi combines jumbo fruit size with main season maturity while exhibiting outstanding quality and exceptional yield. The fruits are firm and very uniform, showing excellent tolerance to checking / cracking.	
★ 37448	Mammoth	72	Very Thick	Dark Green	3,000 to 5,000	PVY, TMV	FM, P	Produces high quality, uniform, dark green fruit making it ideal for fresh and processing. Truly "mammoth" in size, this jumbo jalapeño is very adaptable for the most discerning markets. Superior yields complement its excellent fruit quality. Continuous set provides for extended harvest window.	



SV3198HJ X3R® ★



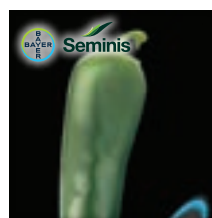
SV8066HJ X3R®




TALON



TRICKSTER **NEW**



TZOTZIL

PEPPERS			HOT Hybrid					Pricing on pages 79	
▲			Days	Flesh	Color	Relative Scoville Rating	Disease	Use	Features
Jalapeño continued									
★	37410	SV3198HJ X3R®	68	Thick	Dark Green to Red	750 to 1,000	BLS 0,3,7,8	FM, P	Hot nacho jalapeno with concentrated set of long, cylindrical fruit. Slow to check.
	37419	SV8066HJ X3R®	74	Thick	Dark Green to Red	0	BLS 0-3, 7,8	FM, P	Offers jalapeno flavor with no heat. Great for blending with hot jalapenos to customize heat level of salsa or hot sauce.
	37451	Talon	75-80	Thick	Dark Green to Red	3,500 to 6,000	BLS ^{1,2,3}	FM, P	Consistently produces high yields of fruit that are tolerant to anthocyanin and cracking. Vigorous plant. Very adaptable.
NEW	37479	Trickster	75	Thick	Dark Green to Red	0	BLS ^{1,2,3}	FM, P	A new hybrid No-Heat Jalapeno. Extra large, thick walls, uniform cylindrical fruit on a medium to large plant.
	37430	Tzotzil 	60	Very Thick	Dark Green to Red	750 to 1,000	BLS 0,3,7,8, PHY	FM, P	Phytophthora tolerant version of PS 11435810. Fruit may be a little longer and slightly more narrow than the 5810.
Additional Hot Peppers can be found on the next page --->.									

PEPPERS HOT Hybrid			M=1,000 seeds				
Priced per package		100 Seeds	500 Seeds				
Price per 1,000 seeds (M)				1M	5M	25M	50M
Anaheim							
37412	Charger	15.05	66.40	94.85	87.80	83.60	80.35
37462	Spitfire	11.70	51.60	73.65	68.15	64.90	62.40
Ancho							
37457	Sargento	11.30	49.85	71.15	65.85	62.70	60.25
37455	Tiburon F300	7.85	34.55	49.35	45.65	43.45	41.75
Cayenne							
37458	Arapaho <small>Cheyenne</small>	11.15	49.25	70.30	65.05	61.95	59.55
Hot Cherry							
37467	Bombita	16.00	70.75	101.05	93.55	89.05	85.60
37417	Time Bomb	13.95	61.70	88.10	81.55	77.65	74.65
Habanero							
37423	Kabal	12.75	56.40	80.55	74.55	71.00	68.25
37432	Rey Pakal	12.75	56.40	80.55	74.55	71.00	68.25

PEPPERS HOT Hybrid			M=1,000 seeds					
Priced per package		100 Seeds	500 Seeds					
Price per 1,000 seeds (M)					1M	5M	25M	50M
Hot Wax								
37422	Blazing Banana	11.80	52.10	74.40	68.85	65.55	63.00	
37408	Inferno	10.90	48.20	68.80	63.70	60.65	58.30	
Jalapeño								
37476	Jedi	11.70	51.65	73.75	68.25	65.00	62.50	
37448	Mammoth	11.70	51.65	73.75	68.25	65.00	62.50	
37410	SV3198HJ ^{X3R®}	11.80	52.15	74.50	68.95	65.65	63.10	
37419	SV8066HJ ^{X3R®}	13.45	59.45	84.90	78.60	74.85	71.95	
37451	Talon	11.70	51.65	73.75	68.25	65.00	62.50	
37479	Trickster	10.85	47.80	68.25	63.15	60.10	57.75	
37430	Tzotzil ^{F300}	11.25	49.60	70.80	65.55	62.40	60.00	



CRACKLE



POTOSI



TAKARA

VEGETABLE ROOT INOCULANT
Naturall™ for Vegetables contains proprietary and patent pending biologicals that colonize the root system of plants. Crop stress such as disease and dry weather can be alleviated, and often systemically, so that root colonization by this treatment can affect the physiology of the whole plant resulting in higher yields. **See page 123 for application rates and pricing.**

PEPPERS		HOT Hybrid						
▲		Days	Flesh	Color	Relative Scoville Rating	Disease	Use	Features
Miscellaneous Hot								
37421	Crackle	65	Thin	Green to Red	1,500 to 3,000		FM	"Finger Hot" type with length of 4 - 5 inches. Multiple harvests with fruit maintaining good size.
37465	Potosi				4,000 to 4,500	BLS ^{0-3,7,8} , N, TMV	FM	A hybrid Serrano type with large fruit size and classic shape. Very productive.
37420	Takara	60	Thin	Bright Green to Bright Red	50 to 200		FM	Typical shishito type pepper with small fruit and mild but rich flavor. The compact plant has a spreading habit, short internodes, is well branched and has high production potential. The fruit uniformity is superior to OP strains. The peduncle holds well to the fruit.

PEPPERS HOT Hybrid		M=1,000 seeds					
		100 Seeds	500 Seeds				
				1M	5M	25M	50M
<i>Miscellaneous Hot</i>							
37421	Crackle	8.35	36.80	52.55	48.65	46.30	44.50
37465	Potosi	10.25	45.35	64.75	59.95	57.05	54.85
37420	Takara	12.10	53.35	76.20	70.55	67.15	64.55

* Multiple packages may be used to fill orders for these quantities.

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SAVE WITH CASH DISCOUNTS

Cash discounts are available throughout the season and are a great way to add money to your bottom line.

See page 130 for all of the details.

November7%
December.6%
January5%
February4%
March3%
April2%

PEPPERS		HOT OP Heritage Varieties						
		Days	Flesh	Color	Class Type	Relative Scoville Rating	Use	Features
37502	Cayenne Long Slim	72	Thin	Green to Red	Cayenne	30,000 to 50,000	P	Very productive, pungent, home garden variety.
37501	Hungarian Yellow Wax	70	Medium Thick	Yellow to Red	Wax	750 to 3,000	FM, P	Cylindrical fruit are 6 to 8" long x 1 ½ - 2" diameter fruit.
37512	Red Cherry ^{Large}	75	Medium Thick	Medium Green to Red	Cherry	3,500	FM, P	CROP FAILURE Processing, home garden, and pickling.

PEPPERS HOT OP Heritage Varieties		M=1,000 seeds			
Priced per package		1/2 oz	1 oz.	4 oz	1#
37502	Cayenne Long Slim	6.50	9.45	29.40	85.20
37501	Hungarian Yellow Wax	6.50	9.45	29.40	85.20
37512	Red Cherry ^{Large}	Crop Failure			

PUMPKIN PLANTING/HARVESTING TIMING CHART

Pumpkin growers who are planting multiple varieties need to consider multiple planting dates so that they can harvest their crop at its peak. The planting date plus the maturity of the variety should equal the potential harvest date. Keep in mind that higher or lower than average heat and sunlight may also impact the development of the crop by decreasing or increasing its maturity.

Use the following chart to align your pumpkin variety maturity with your desired harvest date to schedule planting.

Variety Maturity	Planting Date: May 1 Harvest Range	Planting Date: May 15 Harvest Range	Planting Date: June 1 Harvest Range	Planting Date: June 15 Harvest Range	Planting Date: July 1 Harvest Range
80	July 10 - July 30	July 24 - Aug. 13	Aug. 10 - Aug. 30	Aug. 24 - Sept. 13	Sept. 9 - Sept. 29
85	July 15 - Aug. 4	July 29 - Aug. 18	Aug. 15 - Sept. 4	Aug. 29 - Sept. 18	Sept. 14 - Oct. 4
90	July 20 - Aug. 9	Aug. 3 - Aug. 23	Aug. 20 - Sept. 9	Sept. 3 - Sept. 23	Sept. 19 - Oct. 9
95	July 25 - Aug. 14	Aug. 8 - Aug. 28	Aug. 25 - Sept. 14	Sept. 8 - Sept. 28	Sept. 24 - Oct. 14
100	July 30 - Aug. 19	Aug. 13 - Sept. 2	Aug. 30 - Sept. 19	Sept. 13 - Oct. 3	Sept. 29 - Oct. 19
105	Aug. 4 - Aug. 24	Aug. 18 - Sept. 7	Sept. 4 - Sept. 24	Sept. 18 - Oct. 8	Oct. 4 - Oct. 24
110	Aug. 9 - Aug. 29	Aug. 23 - Sept. 12	Sept. 9 - Sept. 29	Sept. 23 - Oct. 13	Oct. 9 - Oct. 29
115	Aug. 14 - Sept. 3	Aug. 28 - Sept. 17	Sept. 14 - Oct. 4	Sept. 28 - Oct. 18	Oct. 14 - Nov. 3
120	Aug. 19 - Sept. 8	Sept. 2 - Sept. 22	Sept. 19 - Oct. 9	Oct. 3 - Oct. 23	Oct. 19 - Nov. 8

Pumpkin quality will be the best when harvested nearest to the variety's actual maturity.

First, select the maturity of the variety you are using, then pick the date you would like your pumpkins to look the freshest (nice green handle). The required planting date will be at the top of the column.

For example; if you are planting Gold Medal (95 day) and you want them to look their freshest on September 15th, you will want to plant on June 15. However, if you are planting Gold Rush (120 day) and you also want them to look their freshest on September 15th, you will want to plant on May 15.



SOLID GOLD★ pg. 84

PUMPKINS

PLANTING

Plant pumpkins ½" - 1" deep. For a general rule of thumb plant seed the depth of three times the thickness of the seed. Plant spacing varies depending on fruit size. If planting a large pumpkin give plant approximately 72 sq. ft. of space. Medium sized pumpkins require 30 sq. ft. of space. Pie pumpkins require 24 - 30 sq. ft. of space. Miniature pumpkins require 10 - 24 sq. ft. of space. See the "Pumpkin Planting/Harvesting Timing Chart" on page 81 for additional information.

See "Germination Chart" on page 125 for additional information on germination rate and days to germination at various soil temperatures.

MANAGEMENT

Scout fields every 7 days to ensure crop health. Look for insect, weed, and disease pressure. The first three weeks focus on weeds and insect pressure. Then focus on disease pressure. For weed, insect, and disease identification and treatments consult the Midwest Vegetable Production Guide:

www.ruppseeds.com/MVPG or your local extension. Place pollinators in field to ensure maximum fruit set.

HARVEST

Harvest when fruit has developed deep color. Handles will appear dry. Cut handles with shears to protect handles from being broken off.

STORAGE

Clean fruit of dirt and wash in 5% chlorine solution. Let air dry and cure for 10 - 12 days. Make sure air is able to circulate around fruit. It is important to keep fruit dry.

POWDERY MILDEW RATINGS

HR - High Resistance
IR - Intermediate Resistance
T - Tolerant

PLANT SPACING

Each variety or type of pumpkin has an optimum plant spacing for its best performance. If plants are too close, stress and competition can decrease fruit size and possibly even reduce the number of female flowers. Under extreme stress, tight spacing may eliminate the crop entirely.

- Optimum spacing for maximum yield, especially for jack-o-lantern pumpkins, will not necessarily be the best spacing for large fruit size. For large fruit, we would suggest reducing plant density to the next recommended plant population.

PLANT SPACING (CONTINUED)

- Accurate plant spacing will be an equal opportunity environment for every plant.
- Suggested populations are for final plant stands.
- To achieve ideal plant populations it is necessary to either over-plant and hand thin or to plant according to recommendations and hand plant later to fill skips.
- Seed corn maggots, wire worms, mice and birds, floods or lack of rain are all common problems that effect accurate stand establishment.

PLANT SPACING CHART

	Row Width	Distance Between Plants	Plants Per Acre
Category 1	12'	6'	605
Category 2	7 ½ to 9'	4'	1,210 to 1,450
Category 3	6 to 7 ½'	4'	1,450 to 1,815
Category 4	5 to 6'	2'	3,600 to 4,350



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Naturall

VEGETABLE ROOT INOCULANT

Naturall™ for Vegetables contains proprietary and patent pending biologicals that colonize the root system of plants. Crop stress such as disease and dry weather can be alleviated, and often systemically, so that root colonization by this treatment can affect the physiology of the whole plant resulting in higher yields. See page 123 for application rates and pricing.

GROWER PREFERRED ALL-STARS ★ PUMPKINS

XTRA LARGE

With its early 95 day maturity, growers can plant **Early Giant** later and still get orange pumpkins for fall. This makes it a preferred choice when challenging spring weather delays planting.

Under ideal growing conditions, **Gold Medal** will produce fruit in the 30 lb. size category. This dark orange, large handled variety has a full vine and 90 day maturity.

Growers are still telling us that **Solid Gold** is one of the best varieties that they have ever grown. It is the most uniform 20-25 lb. variety on the market. Remember to give it room, 25 square feet per plant at a minimum. It also has a 105 day maturity so plant accordingly. Its dark orange color and large handle make Solid Gold a winner.

LARGE

A long awaited variety in the powdery mildew resistant class with a nice black handle atop a really dark orange, deep ribbed fruit is **Bayhorse Gold**. An 18-22 lb. fruit average make this one a sure winner for the wholesale market.

Carbonado Gold is a 40 count pumpkin that has a very uniform, round shape with strong PMT. Its dark orange fruit with black handles will make this variety an industry standard.

MID SIZE

Growers tell us **Gold Standard** is the highest yielding 13-15 lb. pumpkin in the market. Its dark orange fruit and nice handles make it a winner.

Skidoo Gold is a powdery mildew tolerant pumpkin in the 12-15 lb. size. Its dark color and handle with uniform fruit make this variety a standout.

SMALL / PIE

Bisbee Gold's heavy ribbing, dark orange fruit and black handle make it a standout variety. The heavy yield of 6-7 lb. fruit along with Bisbee Gold's strong powdery mildew resistance make it a must have.

Prankster is a 3-5 lb. PMR pie pumpkin that is dark orange, deep ribbed, and has a very nice sized black handle making this one of the prettiest pie pumpkins on the market.

MINIATURE

A mini pumpkin with powdery mildew tolerance, **Gold Speck** delivers very uniform darker orange fruit, has a larger stem and is higher yielding than similar miniature varieties. Gold Speck is 20% smaller than Jack-B-Quik.

SPECIALTY

With the red veins on a white background, **One Too Many** is the only thing like it on the market. That is what makes it sell.

WHITE

At 20-30 lb. average, **Crystal Star** is one of the largest white pumpkins on the market. Its round shape and classic white color make this fly off the shelf. It has a large vine, so give it room to grow.



Barry Rupp
Vegetable Consultant

PUMPKINS		GIANT					
		Days	Weight pounds	Skin	Vine	Spacing Category	Features
38501	Dill's Atlantic Giant ^{PVP}	120	100 - 600	Orange	Very Large	1	Produces giant show pumpkins. Complete with slightly flattened/round fruit with moderately defined ribbing, this Rupp release is targeted for those growers who want to enhance their already existing Rupp "Gold Series" pumpkin line. Without question, a Rupp giant pumpkin that is sure to be a "smashing" success!
38092	Monster Smash ^{F1}	120	50 - 150	Bright Orange	Very Large	1	An excellent display pumpkin with superior shape and color to Atlantic Giant.
38007	Prizewinner ^{F1}	120	50 - 200	Orange	Very Large	1	A Rupp product that is a blend of very large pumpkins with coats of many colors. The base of the blend will be a dark red-orange pumpkin that does not fade in the sun. Other colors are white, pink & blue, hubbard blue, plus peach and other nuances discovered in our breeding nursery. All of the fruit are pumpkin shaped and will definitely create a new concept in fall displays.
38074	World of Color ^{Blend}	120	50 - 125	Multi Colored Mix	Very Large	1	

PUMPKINS GIANT		M=1,000 seeds			
Priced per package		1 oz.	4 oz.		
Priced per pound in these package sizes				1#	5#
38501 Dill's Atlantic Giant		17.85	46.85	140.85	137.85
					1,400

PUMPKINS GIANT		M=1,000 seeds					
Priced per package		25 Seeds	100 Seeds	250 Seeds			
Price per 1,000 seeds (M)					1M	3M	Seeds /lb.
38092 Monster Smash		63.75	118.05	314.80	311.55		2,900
38007 Prizewinner ^{F1400}		30.15	100.35	185.75	495.25	492.00	1,300
38074 World of Color ^{Blend}		67.15	124.30	331.35	328.10		1,200



BELLATRIX



EARLY CAPTAIN **NEW**



EARLY GIANT ★



EARLY KING



GILTEDGE GOLD



GOLD MEDAL ★



GOLD MEDALLION



GOLD RUSH



LARGE MARGE



PHAT JACK



QUIGLEY GOLD



SOLID GOLD ★

PUMPKINS		XTRA LARGE							
		Days	Weight pounds	Skin	Powdery Mildew	Vine	Spacing Category	Bin Count	Features
38060	Bellatrix ^{F1}	95	25+	Orange	IR	Large Vine	1 or 2	35	Large, round, attractive orange pumpkin with a strong, dark green handle.
NEW 38130	Early Captain	90	30 - 40	Dark Orange	IR	Large Vine	1 or 2	15 - 25	Early Captain is a extra large dark orange upright pumpkin that has Powdery Mildew tolerance with a very large handle. It does need space to make size.
★ 38009	Early Giant ^{F1}	95	25 - 30	Dark Orange	IR	Large Vine	2	30 - 35	Upright fruit on a productive plant with excellent orange color. Intermediate resistance to powdery mildew.
38011	Early King ^{F1}	90	22 - 28	Deep Orange	IR	Large Vine	2	35	Rounded fruit on a productive plant with excellent orange color. Intermediate resistance to powdery mildew.
38123	Giltedge Gold ^{RPX 6879 F1}	100	18 - 24	Orange	IR	Medium Vine	2	35-40	The fruit have an elevated shape with a rough texture and dark, healthy handles. To maintain fruit weight, do not crowd the plants.
★ 38050	Gold Medal ^{F1}	95	25+	Deep Orange		Large	1 or 2	30	A Rupp hybrid that is at the top of the class in appearance for the retail marketer. A large pumpkin with dark color and a great, long handle. U.S. Patent #5,811,642.
38071	Gold Medallion ^{F1}	110	30+	Orange		Large	1 or 2	30	A sister hybrid to Gold Medal that is 2 lbs. larger and has a larger vine. U.S. Patent #5,811,642.
38523	Gold Rush	120	20 - 35	Deep Orange		Large	1 or 2	30	A large Rupp pumpkin with handles 4" long and 3" in diameter, thick flesh and heavy. U.S. Patent #5,811,642.
38500	Jumpin Jack TM	120	20 - 40	Orange		Large Very Vigorous	1 or 2	30	A Rupp exclusive. Very large, well handled, taller than wide variety.
38090	Large Marge ^{F1}	105	30 - 40	Dark Orange		Vine	1 or 2	30	A new, extremely large Sakata pumpkin with a large, dark, embedded handle to match the fruit size. Can set multiple fruit per plant and maintain size. Blocky round shape. Ribbed with wrinkled skin.
38072	Phat Jack	125	50 +	Orange		Medium	1 or 2	25	A very large Jack O' Lantern pumpkin from Siegers. Tall with a thick handle.
38117	Quigley Gold ^{RPX 6883 F1}	100	22 - 26	Dark Orange	IR	Medium Vine	2	30-35	Its rough texture with varying amounts of warts make this a great addition to fall displays. The round fruit with slight ribbing has some gold flecking and a dark handle. Harvest early for green warts.
★ 38085	Solid Gold ^{F1}	100	25	Deep Orange		Medium	2	35	A Rupp hybrid that has performed very well on the farm. Has excellent color, handles and yields. U.S. Patent #5,811,642.



20 KARAT GOLD



BANNACK GOLD



BAYHORSE GOLD ★



CARBONADO GOLD ★



EAGLE CITY GOLD



GARNET GOLD ↗

PUMPKINS XTRA LARGE

M=1,000 seeds

		250 Seeds				
Priced per package						
Price per 1,000 seeds (M)			1M	3M	25M	100M
38060	Bellatrix ^{F1400}	36.60	97.55	94.30	91.80	90.50
38130	Early Captain	35.85	95.50	92.25	89.75	88.45
38009	Early Giant ^{F1400}	34.95	93.15	89.90	87.40	86.10
38011	Early King ^{F1400}	35.35	94.20	90.95	88.45	87.15
38123	Giltedge Gold ^{F1400}	43.50	115.95	112.70	110.20	108.90
38050	Gold Medal	23.55	62.70	59.45	56.95	55.65
38050	Gold Medal ^{F1400}	25.90	69.00	65.75	63.25	61.95
38050U	Gold Medal ^{Untreated}	23.55	62.70	59.45	56.95	55.65
38071	Gold Medallion	18.30	48.75	45.50	43.00	41.70
38071	Gold Medallion ^{F1400}	20.65	55.05	51.80	49.30	48.00

PUMPKINS XTRA LARGE

M=1,000 seeds

		250 Seeds				
Priced per package						
Price per 1,000 seeds (M)			1M	3M	25M	100M
38523	Gold Rush	13.35	35.60	32.35	29.85	28.55
38523	Gold Rush ^{F1400}	15.75	41.90	38.65	36.15	34.85
38090	Large Marge ^{F1400}	38.50	102.60	99.35	96.85	95.55
38117	Quigley Gold ^{F1400}	44.00	117.30	114.05	111.55	110.25
38085	Solid Gold	29.75	79.25	76.00	73.50	72.20
38085	Solid Gold ^{F1400}	32.10	85.55	82.30	79.80	78.50
Priced per package		1 oz.	4 oz.			
Priced per pound in these package sizes				1#	5#	25#
38500	Jumpin' Jack TM	8.15	24.05	73.95	70.95	68.95
38072	Phat Jack ^{F1400}	15.50	45.80	140.90	137.90	135.90

PUMPKINS

LARGE

Pricing on page 86

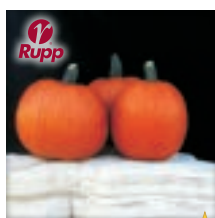
		Days	Weight pounds	Skin	Powdery Mildew	Vine	Spacing Category	Bin Count	Features
38068	20 Karat Gold ^{F1}	100	18 - 22	Dark Orange	IR	Semi Bush	2	40	A Rupp pmt, semi-bush hybrid with dark orange rind color and good handles. A potential option for the shipper market. U.S. Patent #5,811,642.
38112	Bannack Gold ^{RPX 6208 F1}	100	16 - 22	Deep Orange	IR	Medium Vine	3	35	Bannack Gold has a unique look with dark flecking and shadowed warts. It has a slightly elevated shape with a well attached handle.
★ 38061	Bayhorse Gold ^{F1}	100	15 - 20	Very Dark Orange	IR	Vine	3	40	Uniform, slightly elevated hybrid with strikingly gorgeous, very dark orange fruit and elongated dark handle. Can be used for roadside sales or wholesale shipping in 40 count bins. A grower favorite!
★ 38069	Carbonado Gold ^{F1}	100	15 - 18	Very Dark Orange	HR	Vine	3	40	Dynamic Rupp pumpkin variety with extremely uniform shape and strong handle. Similar in weight to Bayhorse Gold, with a more rounded shape. Perfect for 40 count shipping bins or roadside retail market.
38062	Eagle City Gold ^{F1}	100	18 - 24	Medium Orange	IR	Vine	3	35 - 40	The shallow ribs on the round fruit make it an ideal choice for carving. Has intermediate resistance to powdery mildew.
↗ 38113	Garnet Gold ^{RPX 6209 F1}	100	13 - 17	Dark Orange	HR	Medium Vine	3	40	Beautiful, round fruit have heavy ribbing, strong handles and a uniform shape.
38001	Orange Rave ^{F1}	100	15 - 25	Orange	IR	Semi Vine	2	35 - 40	A hybrid with rounded to slightly upright fruit and moderate ribbing. Has preferred dark orange color and intermediate resistance to powdery mildew.
38550	Wolf ^{PVP}	120	15 - 25	Deep Orange		Large	1	40	Round to oblate shaped fruit with moderate ribs and very thick, long handles. The flesh thickness is excellent which helps to prevent against flat-sided fruit and makes them heavy for their size.



ORANGE RAVE



WOLF



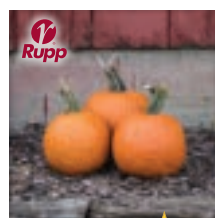
GOLD STANDARD ★






SECRETARIAT



SKIDOO GOLD ★



BISBEE GOLD ★

PUMPKINS			MID SIZE								
	▲		Days	Diameter Height	Weight pounds	Skin	Powdery Mildew	Vine	Spacing Category	Bin Count	Features
★	38045	Gold Standard ^{F1} 	90	13 x 13"	16	Deep Orange		Restricted Vine	3	45	A Rupp pumpkin with good handles, high yields and deep orange color. Will blend right in with Howden to bring the average size down.
	38034	Secretariat ^{F1} 	105	12 x 9"	15	Dark Orange	IR	Restricted Vine	3	45	Prolific plants produce beautiful, slightly-flattened fruit with thick handles. Works well for binned markets or road-side growers.
★	38076	Skidoo Gold ^{F1} 	90	10 x 11"	12 - 15	Deep Orange	HR	Restricted Vine	3	45	Blocky, heavily ribbed, mid-sized hybrid with powdery mildew tolerance. Improved uniformity and color over comparable varieties in the same weight class.

PUMPKINS LARGE		M=1,000 seeds				
Priced per package		250 Seeds				
Price per 1,000 seeds (M)			1M	3M	25M	100M
38068	20 Karat Gold	22.80	60.75	57.50	55.00	53.70
38068	20 Karat Gold F1400	25.15	67.05	63.80	61.30	60.00
38112	Bannack Gold F1400	42.30	112.75	109.50	107.00	105.70
38061	Bayhorse Gold F1400	42.15	112.30	109.05	106.55	105.25
38069	Carbonado Gold F1400	43.35	115.50	112.25	109.75	108.45
38062	Eagle City Gold F1400	38.70	103.10	99.85	97.35	96.05
38113	Garnet Gold F1400	42.30	112.75	109.50	107.00	105.70
38001	Orange Rave F1400	37.15	98.95	95.70	93.20	91.90
Priced per package		1 oz.	4 oz.			
Priced per pound in these package sizes				1#	5#	25#
38550	Wolf F1400	20.10	59.55	183.15	180.15	178.15

PUMPKINS MID SIZE		M=1,000 seeds				
Priced per package		250 Seeds				
Price per 1,000 seeds (M)			1M	3M	25M	100M
38045	Gold Standard	14.85	39.60	36.35	33.85	32.55
38045	Gold Standard F1400	17.25	45.90	42.65	40.15	38.85
38045U	Gold Standard Untreated	14.85	39.60	36.35	33.85	32.55
38034	Secretariat F1400	34.35	91.60	88.35	85.85	84.55
38076	Skidoo Gold F1400	36.30	96.75	93.50	91.00	89.70

PUMPKINS SMALL / PIE		M=1,000 seeds					
Priced per package		250 seed					
Price per 1,000 seeds (M)			1M	3M	25M	100M	Seeds /lb.
38075	Bisbee Gold F1400	38.70	103.10	99.85	97.35	96.05	3,100
38020	Darling F1400	35.85	95.55	92.30	89.80	88.50	4,100
38115	Fort Knox F1400	39.35	104.90	101.65	99.15	97.85	2,500
38003	Jack Sprat F1400	35.10	93.55	90.30	87.80	86.50	5,800
38038	Pik-A-Pie	16.35	43.55	40.30	37.80	36.50	3,800
38038	Pik-A-Pie F1400	18.70	49.85	46.60	44.10	42.80	3,700
38038U	Pik-A-Pie Untreated	16.35	43.55	40.30	37.80	36.50	3,800
38067	Prankster F1400	24.25	64.55	61.30	58.80	57.50	3,400
38047	Touch of Autumn	11.80	31.45	28.20	25.70	24.40	5,500
38047	Touch of Autumn F1400	14.20	37.75	34.50	32.00	30.70	5,500
38047U	Touch of Autumn Untreated	11.80	31.45	28.20	25.70	24.40	5,500
38116	Yosemite F1400	37.25	99.30	96.05	93.55	92.25	2,400
Priced per package		1 oz.	4 oz.				
Priced per pound in these package sizes				1#	5#	25#	Seeds /lb.
38507	Small Sugar Asgrow Strain	5.40	16.00	49.10	46.10	44.10	3,700

CURIOUS ABOUT THE NAMES OF OUR PUMPKINS?

Montana's gold rush started in 1863 at Bannack – check it out and read about Montana's mining history and view photos.

www.ruppseeds.com/PName





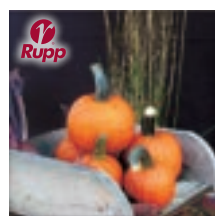
DARLING



FORT KNOX



JACK SPRAT

















PIK-A-PIE



PRANKSTER



YOSEMITE

PUMPKINS		SMALL / PIE							Features
		Days	Diameter Height	Weight pounds	Skin	Powdery Mildew	Vine	Spacing Category	
★	38075 Bisbee Gold ^{F1}  	90	6 1/2 x 6 1/2"	6 - 7	Dark Orange	HR	Semi Bush	3	Gorgeous dark orange fruit and jet black handles. Has tremendously refined ribbing and high resistance to PM. Top of the line!
	38020 Darling ^{F1} 	90	8 x 12"	6 - 8	Dark Orange	IR	Semi Bush	3	Unique tall pie pumpkin with intermediate resistance to powdery mildew.
🔪	38115 Fort Knox ^{RPX 6875}  	90	7 x 7"	6	Dark Orange	HR	Medium	3	Great for school groups! High yielding pumpkin with a handle that appears as indestructible as its namesake.
	38003 Jack Sprat ^{F1} 	100	5" x 6"	2 - 3	Dark Orange	IR	Semi Bush	3	Fruit have a nice dark orange exterior and dark green embedded handles. Very uniform in size and shape. High fruit numbers per plant with an excellent yield potential.
	38038 Pik-A-Pie ^{F1}  	85	6 x 5"	5 - 6	Orange		Semi Bush	3	Produces uniform fruit with a large, dark green handle. Yields an abundance of excellent quality pumpkins.
★	38067 Prankster ^{F1}  	85	6 x 4"	3	Dark Orange	IR	Semi Bush	3	An excellent stemmed powdery mildew tolerant pumpkin. Good size for boxing, painting and the school market.
	38507 Small Sugar ^{Asgrow Strain}	100	6 x 7"	5 - 6	Orange		Medium	3	A selection with a distinctly superior handle when compared to other Small Sugar strains.
	38047 Touch of Autumn ^{F1}  	95	6 x 5"	2 1/4	Medium Orange	IR	Semi Bush	3	Great for school groups! A hybrid, with excellent handles and is just the right size for boxing. In most university trials is the highest yielding in fruit numbers and pounds per acre.
🔪	38116 Yosemite ^{RPX 6880}  	90	6 1/2 x 7"	6 - 7	Deep Orange	IR	Medium	3	Great for school groups! Yosemite's extra-long handle makes it an attractive addition for your farm market. Our trial cooperators love its "stunning shape and color." Stores extremely well.

GROW YOUR BEST PUMPKINS YET!



Our pumpkin guide features tips from product selection through planting and harvest. Visit our website to download it or request a printed copy.



www.ruppseeds.com/PumpkinGuide



BATWING MIX



GOLD DUST



GOLD SPECK ★



JACK-B-QUIK



ORANGITA



SPARK

PUMPKINS		MINIATURE							
Days	Diameter Height	Weight pounds	Skin	Powdery Mildew	Vine	Spacing Category	Features		

38548 **Batwing Mix**

90

3"

¼

Orange/
Green

Semi
Bush

4

A unique orange and dark green colored pumpkin when harvested early to full orange color at maturity.

38066 **Gold Dust**   141

95

3 ½ x 2"

⅓

Orange

IR

Semi
Bush

4

A Rupp developed semi bush hybrid with darker fruit than Jack-B-Quik plus powdery mildew tolerance. Most fruit set close to the crown early and escape virus flecking. The strain that growers prefer.

Waiver Needed: Our current seed lot may produce up to 15% fruit that vary in shape, color, and size. We ask that you sign the "Gold Dust Agreement" on page 141. Pricing has been adjusted for this current seed lot.



38077 **Gold Speck**  

95

3 x 2"

¼

Orange

IR

Bush

4

A Rupp sister bush hybrid to Gold Dust, with similar vine and fruit characteristics, but smaller than Jack-B-Quik and Munchkin. Most fruit set close to the crown early and escape virus flecking. Our highest yielding Jack-B-Little type. The strain that growers prefer.

38525 **Jack-B-Quik** 

95

3 x 2"


¼

Orange

Medium

4

A more ribbed mini with taller and darker orange fruit.

38042 **Orangita** 

80

5 x 3"

1 - 1 ½

Orange

HR

Semi
Bush

4

Beautiful mini pumpkin featuring a disk shape with deep ribbing. Makes for an excellent display.

38043 **Spark**

90

3.5 x 2"

½


Deep
Orange
/ Yellow
Stripes

HR

Vine

4

Very uniform, striped ornamental variety with a dark green handle that is strongly attached to the fruit. Excellent for fall decorations when used together with Casperita.

38538 **Wee-B-Little**  

95

3 x 3"

½

Orange

Bush

3

An AAS winner that can be carved and provides excellent plant health on a tight bush plant. A true mini pumpkin.

Growing Tip: Wee-B-Little is known for its poor yields! High levels of nitrogen causes excessive plant growth and low fruit set. If you force it into the survival mode (more like a weed) with low nitrogen, plant size will be reduced and fruit numbers will multiply and give much better yields. We have proven to ourselves low input production improves yields.

38078 **WeeeeeOne Blend**  

95

1 ½ x 1
½" - 3 x 3"

½

Orange

IR

Large
Bush

3

A unique miniature pumpkin with shallow ribs. Vigorous bush with intermediate resistance to powdery mildew and very high yields. A must have in your miniature and gourd lineup.

PUMPKINS MINIATURE

M=1,000 seeds

	Priced per package Price per 1,000 seeds (M)	250 seed				
		1M	3M	25M	100M	Seeds /lb.
38066 Gold Dust	18.55	49.35	46.10	43.60	42.30	6,600
38066 Gold Dust ^{F1400}	20.90	55.65	52.40	49.90	48.60	6,600
38066U Gold Dust ^{Untreated}	18.55	49.35	46.10	43.60	42.30	6,700
38077 Gold Speck	23.00	61.30	58.05	55.55	54.25	7,000
38077 Gold Speck ^{F1400}	25.35	67.60	64.35	61.85	60.55	7,000
38077U Gold Speck ^{Untreated}	23.00	61.30	58.05	55.55	54.25	7,000
38042 Orangita ^{F1400}	29.70	79.20	75.95	73.45	72.15	6,500
38043 Spark	36.05	96.05	92.80	90.30	89.00	5,900

PUMPKINS MINIATURE

M=1,000 seeds

	Priced per package Price per 1,000 seeds (M)	250 seed				
		1M	3M	25M	100M	Seeds /lb.
38538 Wee-B-Little	11.85	31.55	28.30	25.80	24.50	5,500
38538 Wee-B-Little ^{F1400}	14.20	37.85	34.60	32.10	30.80	5,400
38538U Wee-B-Little ^{Untreated}	11.85	31.55	28.30	25.80	24.50	5,500
WeeeeeOne Blend						
38078 ^{F1400}	26.75	71.30	68.05	65.55	64.25	7,600
WeeeeeOne Blend						
38078U ^{Untreated}	24.40	65.00	61.75	59.25	57.95	7,900



WEE-B-LITTLE



WEEEEONE BLEND



GROW YOUR BEST PUMPKINS YET!



Our pumpkin guide features tips from product selection through planting and harvest. Visit our website to download it or request a printed copy.



www.ruppseeds.com/PumpkinGuide

PUMPKINS MINIATURE

M=1,000 seeds

	Priced per package		Priced per pound in these package sizes			
	1 oz.	4 oz.	1#	5#	25#	Seeds /lb.
38548 Batwing Mix	16.00	47.15	145.00	142.00	140.00	5,800
38525 Jack-B-Quik	9.95	29.45	90.60	87.60	85.60	7,000

BARRY'S PUMPKIN GROWING TIPS FOR SUCCESS

My name is Barry Rupp and I have been serving growers as a vegetable seed consultant with Rupp Seeds for over 30 years. Our company started breeding pumpkins about 25 years ago and I've been passionate about them ever since. Following are my "Tips for Success for the Novice Pumpkin Grower" or maybe "Reminders for Success for the Experienced Pumpkin Grower". Regardless of your experience in raising pumpkins, here are nine helpful suggestions, listed in no particular order:

CROP ROTATION

I strongly recommend that growers NOT plant pumpkins in the same field in consecutive years and would suggest that waiting a minimum of three years between pumpkin crops would be best. If you have adequate acreage, I would even prefer that you wait 5 to 7 years before raising another pumpkin crop in that same field. This helps to reduce and possibly even prevent soil diseases and pest infestations. When possible, raising pumpkins after wheat is a great option. Rotating pumpkins in after corn and soybeans can increase the likelihood of higher rootworm populations and phytophthora, which will be detrimental to the crop.

PLANT SPACING

Correct plant spacing is very important and will vary by product. Planting a full vine variety too close can increase disease pressure. Diseases like powdery mildew or fruit rot can become more prevalent when the vine foliage does not have adequate space for air movement to aid in removing moisture in the plant canopy. Planting too closely will also affect fruit size and yield by holding too much heat in the field and restricting the ability for pollinators to do their job. It also impedes insecticide and fungicide effectiveness by restricting spray penetration.

PEST CONTROL

The biggest problem I hear about concerning insect and disease control is when growers are using the same product in repeated applications. Rotate your insecticide and fungicides based on their mode of action and NOT just brand name or active ingredient. Remember scouting

is one of your best tools. For chemical recommendations, consult the Midwest Vegetable Production Guide www.ruppseeds.com/MVPG.

POLLINATION

Pollinators can have a significant effect on pumpkin yield. I have heard it can take 14 – 17 visits by a pollinator (bees, etc.) in order for a flower to be fully pollinated. Scout your fields in the morning and if you don't see or hear bees, I recommend bringing in 1 hive of bees per acre.

VARIETY CHOICE

Make sure you know your target market before selecting which hybrids you want to grow. Most retail markets will accept a wide range of sizes, shapes and colors, where wholesale markets tend to have more specific requirements around bin count, size, shape, color and handle.

FIELD LOCATION

Vine crops typically perform better on well-drained sandy soils. The heavier the soils, the greater the importance of drainage. When a pumpkin is ripe, any rain that gets taken up by the plant is deposited into the seed cavity, which may lead to and even speed up the process of fruit rot.

BIOLOGICS

Beneficial bacteria in the soil, or added at planting time, will colonize on the roots and improve root and plant health which will help the plant handle stress (i.e. – drought or excessive water) later in the season.

PLANTING TIMING

This is a topic we discuss often as we continue to develop new varieties. If you are currently growing a late maturing variety and choose to also plant an early variety, DO NOT plant them on the same day. The early variety usually ripens way too early for your market and will likely rot before you harvest. We have a very handy "Pumpkin Planting/Harvesting Timing Chart" on page 81 to assist you with your planting dates.

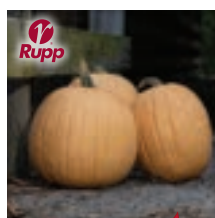
FERTILITY

Soil testing can't be emphasized enough. Know what is already in your soil, and what you need to add. For invaluable information on this, see the Midwest Vegetable Production Guide link listed under Pest Control.





BLUE DOLL



FOOL'S GOLD



FRIGHT



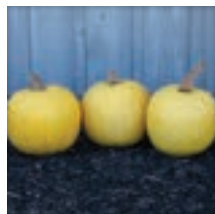
GRIZZLY BEAR



HSC151



INDIAN DOLL



MELLOW YELLOW



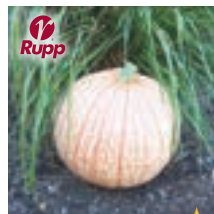
MIDNIGHT



NAKED BEAR



NEW ENGLAND
CHEDDAR



ONE TOO MANY



PORCELAIN DOLL

PUMPKINS		SPECIALTY						Pricing on page 91
		Days	Diameter Height	Weight pounds	Skin	Vine	Spacing Category	Features
38012	Blue Doll	100	12 x 10"	20 - 24	Blue	Very Large Vine	2	Features an exotic blue color and an almost square appearance with deep ribbing. Exhibits deep orange, sweet flesh that can be used for pies, soup, and gourmet culinary delights. Great for stacking displays.
38114	Fool's Gold	90	9 1/2 x 9 1/4"	11 - 12	Tan	Large Vine	3	With its unique tan color, Fool's Gold will catch your customer's eye and it looks great when displayed in a mix with orange and white varieties. Intermediate resistance to powdery mildew.
38118	Fright	90	10 x 9 1/2"	12	Orange with green warts	Medium	3	Add a frightening look to your fall display with this heavily-warted variety. The green warts pop out on this orange pumpkin, making it a favorite of our trial cooperators.
38093	Goose Bumps II	95	8 X 8"	8 - 12	Orange	Medium	3	Improved Goose Bumps with higher percentage of fruit covered with warts.
38128	Grizzly Bear	95	6 x 8"	5 - 8	Light Brown	Medium	3	A small round warted pumpkin with light brown color and heavy warts that are hard and will not damage easily. Strong vines offer intermediate resistance to Powdery Mildew. A great addition to your fall display.
38048	HSC151	110	8 1/2 x 11"	9 - 14	Medium Orange / Green Stripes	Medium	3	Totally hullless, the roasted seeds are delicious with a nutty texture. Compared to other hullless varieties, maturity is earlier and seed yield is exceptional.
38081	Indian Doll	100	6 x 12"	20 - 24	Deep Orange	Vine	2	Indian Doll features a deep-orange color and an almost square appearance. Sweet flesh is great for pies, soup and gourmet culinary delights. Great for fall decorations.
42939	Jarrahdale	95	10"	7 - 8	Blue	Medium	2	The favorite Australian winter squash. Excellent quality flesh, beautiful looking fruit. Good to use for both food or ornamental use.
38044	Mellow Yellow	100	10 x 12"	12 - 15	Yellow	Vine	2	Slightly elevated profile. Medium ribbing. Intermediate tolerance to PM.
38089	Midnight	77		1 - 1 1/2	Black	Semi Bush	4	Very dark green pumpkin having a classic shape with deep ridges. Will start to turn orange after approximately 2 months of storage. Intermediate tolerance to PM. Plant no earlier than June 22.
38030	Naked Bear	105	5 x 6"	2 - 4	Light Orange	Medium	3	Large handled, naked seeded variety. High yielding product for either boxed pie pumpkin or edible seed pack markets.
42969	New England Cheddar	112	8 1/2 x 12"	15	Tan	Vine	2	A hybrid that is excellent for industrial or home processing (canning or pies). It has a uniform rind color and deep orange flesh. It has superior dry matter and sugar content when compared with Long Island Cheese or Dickinson Field.

Plant Porcelain Doll and help in the fight against breast cancer. Visit www.PinkPumpkinPatch.org for details.

Send pledge form and funds to:



Pink Pumpkin Patch Foundation
PO Box 670
Rocky Ford, CO 81067

For promotional materials,
please visit
www.ruppseeds.com/PinkPumpkin



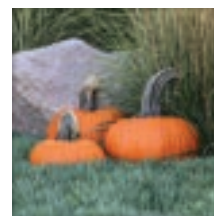
RED WARTY THING



SCARFACE



SMALL WORLD OF
COLOR



THUMPKIN

PUMPKINS			SPECIALTY						Pricing on page 91
▲			Days	Diameter Height	Weight pounds	Skin	Vine	Spacing Category	Features
★	42961	One Too Many ^{F1} 	110	14"	20	White Back- ground with Red Veins	Large Vine	2	A Rupp product with outstanding potential for decorative use, developed through cross species breeding work. Fruit are 75% round with about 25% oblong fruit.
	38029	Porcelain Doll ^{F1} 	110	12 x 10"	20 - 24	Pink	Very Large Vine	3	This eye-catching hybrid pink pumpkin with deep ribbing and almost square appearance, stacks well and is sure to be a winner for your market stand! When picking, wait for the stem to get fully corky for maximum pink potential.
	42953	Red Warty Thing ^{Essex Turban} 	110	14"	20	Bright Orange / Warted	Large Vine	2	A variety sourced from the U.S. Seed Bank with an appearance that is well suited as an unusual addition for the decorative market. Good eating, Hubbard type flesh, very hard, thick rind.
	38533	Rouge Vif d'Etampes ^{Cinderella} 	105	15 x 6"	20	Reddish Orange	Vine	2	A unique pumpkin from France. A flattened, deeply ridged fruit. Surprising beauty, great yield and flavor. Cinderella type used for stacking displays.
	38127	Scarface ^{F1} 	105	12 x 10"	12 - 16	Orange	Medium	3	Largest variety in the Super Freak series.
	38084	Small World of Color 	110	12 x 11"	25 - 30	Multi Color	Vine	1	A Rupp mix with round pumpkin shaped fruit in the maxima class that can be used in a new way of decorating. The blend contains Crystal Star that will keep its white color (not turn blue or yellow), plus a pink and also a pink & blue variety.
	38549	Thumpkin 	120	14 x 8"	15 - 25	Dark Orange	Vine	1	Hard stemmed pumpkin with unique flattened fruit and a gigantic handle. Plant at 72 square feet per plant. Crowding results in fewer but larger pumpkins. From the same supplier as Wolf.

PUMPKINS SPECIALTY		M=1,000 seeds					
Priced per package		100 Seed	250 Seed				
Price per 1,000 seeds (M)				1M	3M	25M	100M
38012	Blue Doll ^{F1400}	20.15	37.30	99.40	96.15	93.65	92.35
38114	Fool's Gold ^{F1400}	23.25	43.00	114.60	111.35	108.85	107.55
38118	Fright ^{F1400}	25.85	47.80	127.40	124.15	121.65	120.35
38093	Goose Bumps II ^{F1400}	23.35	43.20	115.20	111.95	109.45	108.15
38128	Grizzly Bear ^{F1400}	23.15	42.85	114.15	110.90	108.40	107.10
38048	HSC151 ^{F1400}	13.15	24.30	64.80	61.55	59.05	57.75
38081	Indian Doll ^{F1400}	18.80	34.80	92.80	89.55	87.05	85.75
38044	Mellow Yellow ^{F1400}	23.15	42.85	114.15	110.90	108.40	107.10
38089	Midnight ^{Black Kat F1400}	18.15	33.55	89.45	86.20	83.70	82.40
38030	Naked Bear	17.85	33.05	88.10	84.85	82.35	81.05
New England Cheddar		8.25	15.25	40.65	37.40	34.90	33.60
42969U	New England Cheddar ^{Untreated}	8.25	15.25	40.65	37.40	34.90	33.60
42969	New England Cheddar ^{F1400}	9.55	17.65	46.95	43.70	41.20	39.90

PUMPKINS SPECIALTY		M=1,000 seeds					
Priced per package		100 Seed	250 Seed				
Price per 1,000 seeds (M)				1M	3M	25M	100M
42961	One Too Many	36.90	68.25	182.00	178.75	176.25	174.95
42961U	One Too Many ^{Untreated}	36.90	68.25	182.00	178.75	176.25	174.95
42961	One Too Many ^{F1400}	38.20	70.65	188.30	185.05	182.55	181.25
38029	Porcelain Doll ^{F1400}	28.25	52.30	139.35	136.10	133.60	132.30
42953	Red Warty Thing	12.15	22.45	59.80	56.55	54.05	52.75
42953U	Red Warty Thing ^{Untreated}	12.15	22.45	59.80	56.55	54.05	52.75
42953	Red Warty Thing ^{F1400}	13.40	24.80	66.10	62.85	60.35	59.05
Rouge Vif d'Etampes							
38533	Rouge Vif d'Etampes ^{F1400}	16.70	30.85	82.20	78.95	76.45	75.15
38127	Scarface ^{F1400}	23.35	43.20	115.20	111.95	109.45	108.15
38084	Small World of Color	50.35	93.15	248.30	245.05	242.55	241.25
Priced per package		1 oz.	4 oz.				
Priced per pound				1#	5#	25#	Seeds /lb.
42939	Jarrahdale	5.45	16.10	49.40	46.40	44.40	2,800
38549	Thumpkin ^{F1400}	21.75	64.35	197.90	194.90	192.90	2,200



CASPERITA



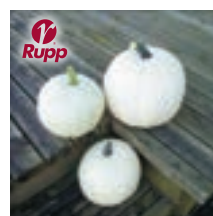
SNOWBALL



ICICLE



BLANCO



COTTON CANDY



WHITE GOLD

PUMPKINS		WHITE							
		Days	Diameter Height	Weight pounds	Skin	Powdery Mildew	Vine	Spacing Category	Features
38532	Baby Boo ^{PVP}	100	3 x 2"	¼	White		Vine	4	A white Jack-B-Quik type variety. Should be planted later than Jack-B-Quik types because it will turn a pale yellow at full maturity.
38032	Casperita ^{F1}	77	3 x 2"	½ - 1	White	IR	Semi Bush	4	Stunning personal sized hybrid with good yield. Classic shape that can be used for both ornamental and edible purposes. Ideal size for restaurant use.
38004	Snowball ^{F1}	90	6 x 6"	1-2	White	IR	Vine	4	Very high yielding variety with attractive smooth round fruit. Bright white coloration with a dark green stem. Has the ability to hold white color under stress.
38122	Icicle ^{F1}	105	5 x 4"	2	White	HR	Medium	4	Icicle is the perfect pie size pumpkin with a nice white color and a strong handle. It grows on a restricted vine. Pairs well with Touch of Autumn. The right size for boxing.
38033	Blanco	100	8 x 6"	4 - 6	White		Medium	4	Flattened shape, medium rib and long handle. Has shown moderate resistance to color change due to sun or light frost. Great alternative for growers who require a consistent high quality white pumpkin. The stay white gene extends the harvest window.
38065	Cotton Candy ^{F1}	110	9 x 8"	5 - 12	White		Vine	3	A Rupp white pumpkin with good handles, a blend of strains that range between 5 and 12 lbs. Harvest and store in the dark to maintain best white color. Excellent for painting. Flesh color is white. Despite its name, this is not good for eating.
38119	White Gold ^{F1 RPX 6927}	90	7 ½ x 8 ¾"	8	White		Medium	3	A new generation of white pumpkin with uniform, slightly ribbed fruit and a well attached black handle.
38016	Casper	90	8 x 10"	10 - 20	White		Medium	3	CROP FAILURE A smooth, bright white-skinned pumpkin for painting.
38510	Flat White Boer Ford	115	10 x 4"	15 - 17	White		Large	2	A flat pumpkin with a creamy white rind and thick orange flesh. The vines are vigorous, providing good cover for the fruit. It is both superbly tasty and great for fall decoration. Stacks well.
38041	Flat Stacker	90 - 95		15 - 20	White		Semi Bush	4	Extremely oblate shape with deep ribbing. Great for stacking. Good disease resistance.
38086	Crystal Star	100	12 x 11"	25 - 35	White		Medium	2	A Rupp variety that will maintain its true white color (not turn blue or yellow at maturity) and be a pumpkin shape.
38547	Full Moon ^{PVP}	115	20x28"	25 - 75	White		Large	2	A large white display pumpkin from Hollar. Harvest when white and store in the shade to maintain white color.
38129	Polar Bear	100	14x18"	30 - 65	White		Large	2	Retains its color after maturity in the field, at market, and in decorative displays. Long, vigorous vines produce fruit typically weighing 30-65 lb, but may exceed 100 lb.



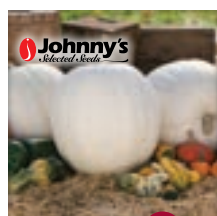
FLAT WHITE BOER
FORD



FLAT STACKER



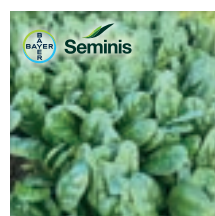
CRYSTAL STAR ★



POLAR BEAR **NEW**



CRUNCHY KING



KONA

RADISH				
▲		Days	Shape	Features
39003	Champion	21	Globe	Bright red, globe-shaped, very firm. Slow to pith.
39105	Crunchy King ^{F1}	24	Globe	Holds round shape and does well all season. Strongest in Fall and Spring slots. Bright white interior with attractive dark red skin. Has very high recovery and is slow to pith.
39001	Easter Egg II	28	Globe	Multi-line mix for the home garden. Red, pink, purple, violet and white radishes; good flavor.
39007	French Breakfast	24	Oblong	Skin is rose scarlet with a white tip. Flesh is white, tender and coarser than most varieties.
39102	Pearl ^{F1}	25	Globe	White round radish with a small green neck for open field production. Very vigorous growth and good resistance to cracking. Nice mix with reds.

RADISH		WINTER / ORIENTAL		
▲		Days	Features	
39701	April Cross ^{F1} Daikon Japanese Type	60	Extra slow bolting. Plant in early spring. Up to 15" long and 2 lbs.	

SPINACH		Hybrid		
▲		Days	Features	
41002	Kona	35	Kona is a mid-late, semi-savoy variety that is well suited for late spring/early summer or autumn production. It produces a dark green leaf with excellent thickness and pliability providing increased yield potential. High resistance to downy mildew.	
41001	Olympia	45	A fast growing and long standing smooth leaf hybrid for early spring or late summer sowing. Tolerant to downy mildew.	

PUMPKINS WHITE		M=1,000 seeds					
Priced per package		100 seed	250 seed				
Price per 1,000 seeds (M)				1M	3M	25M	100M
38033	Blanco ^{F1400}	37.40		99.70	96.45	93.95	92.65
38032	Casperita ^{F1400}	32.10		85.55	82.30	79.80	78.50
38065	Cotton Candy	17.10		45.50	42.25	39.75	38.45
38065	Cotton Candy ^{F1400}	19.45		51.80	48.55	46.05	44.75
38065U	Cotton Candy ^{Untreated}	17.10		45.50	42.25	39.75	38.45
38086	Crystal Star ^{F1400}	45.95	85.05	226.80	223.55	221.05	219.75
38086U	Crystal Star ^{Untreated}	44.70	82.70	220.50	217.25	214.75	213.45
Flat White Boer Ford ^{F1400}							
38510	Flat White Boer Ford ^{F1400}	21.15	56.40	53.15	50.65	49.35	
38041	Flat Stacker ^{F1400}	19.00	35.10	93.50	90.25	87.75	86.45
38547	Full Moon	38.05	70.45	187.85	184.60	182.10	180.80
38122	Icicle ^{F1400}	34.30	91.45	88.20	85.70	84.40	
38129	Polar Bear ^{F1400}	32.30	59.75	159.30	156.05	153.55	152.25
38004	Snowball ^{F1400}	42.85	114.15	110.90	108.40	107.10	
38119	White Gold ^{F1400}	24.05	44.45	118.50	115.25	112.75	111.45
Priced per package		1 oz.	4 oz.				
Priced per pound in these package sizes				1#	5#	25#	
38532	Baby Boo	15.85	46.95	144.40	141.40	139.40	
38016	Casper	7.70	22.80	70.10	67.10		

RADISH		M=1,000 seeds			
Priced per package		4 oz.			
Priced per pound in these package sizes			1#	5#	25#
39003U	Champion ^{Untreated}	5.30	12.60	12.35	12.10
39001	Easter Egg II	9.30	22.05	21.80	21.55
39007U	French Breakfast ^{Untreated}	5.30	12.60	12.35	12.10
Priced per 1,000 seeds in these package sizes		10M	50M	250M	1000M
39105	Crunchy King ^{F300}	1.57	1.47	1.42	1.37
39102	Pearl	2.83	2.73	2.68	2.63

RADISH WINTER/ORIENTAL		M=1,000 seeds		
Price per 1,000 seeds (M)		1M	5M	25M
39701	April Cross	12.70	11.10	10.05

SPINACH Hybrid		M=1,000 seeds			
Price per 1,000 seeds (M)		5M	25M	250M	1,000M
41002	Kona ^{F300}	0.60	0.52	0.47	0.44
41001	Olympia ^{F300}	0.56	0.48	0.43	0.40



BLONDE BEAUTY ★ pg. 97

SQUASH SUMMER

PLANTING

Direct seed into field. Plant $\frac{1}{2}$ " - $\frac{3}{4}$ " deep. Row spacing should range from 36" - 60" apart. In row spacing ranges from 18" - 24".

See "Germination Chart" on page 125 for additional information on germination rate and days to germination at various soil temperatures.

MANAGEMENT

Scout fields every 7 days. Inspect for weeds, insect, and disease infestation.

HARVEST

Harvest every other day. Fruit should be 7 - 8" in length and 1 - $2\frac{1}{2}$ " in diameter. Another way to determine harvestability is to harvest when blossom has wilted.

STORAGE

Store at 40 - 50°F and at 95% humidity.

DISEASE CODES

CMV - Cucumber Mosaic Virus
DM - Downy Mildew
PM - Powdery Mildew
PRV - Papaya Ringspot Virus
WMV - Watermelon Mosaic Virus
ZYMV - Zucchini Yellows Mosaic Virus

HERBICIDE CAUTION

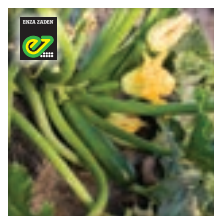
Some pre-emergence herbicides can and will cause distortions in squash and pumpkins, especially the species with the corky stems. It also has been noticed in hardstem varieties. These distortions may show up in both color or shape.



BASIMA



DUNJA ★



GREEN MACHINE



KOPANA



PAYCHECK



SPINELESS BEAUTY ★



SPINELESS
PERFECTION ★



STARSHIP



SAVE WITH CASH DISCOUNTS

Cash discounts are available throughout the season and are a great way to add money to your bottom line.
See page 130 for all of the details.

November	.....7%
December	.....6%
January	.....5%
February	.....4%
March	.....3%
April	.....2%

SQUASH		SUMMER GREEN Hybrid						Pricing on page 96
		Days	Harvest Length	Color	Type	Fruit Shape	Disease	Features
42092	Basima	40	4"	Pale Green	Lebanese	Tapered	WMV, ZYMV	Strong plant habit with semi-erect stem and open habit. Very productive. Perfect for stuffing.
★ 42096	Dunja	45	7 - 8"	Dark Green	Zucchini	Cylindrical	PM, WMV, ZYMV	A high yielding variety with a compact and open plant for ease of picking. Glossy fruit also exudes fine flecking for a quite handsome exterior.
42009	Green Machine	45	7 - 8"	Medium Dark Green	Zucchini	Cylindrical	CMV, PM, WMV, ZYMV	Widely adaptable, high yielding variety. Has a strong semi-open plant with an excellent disease package.
42017	Kopana	45	7 - 8"	Dark Green	Zucchini	Cylindrical	PM, PRSV, WMV, ZYMV	Selected for high tunnel production in the spring. Vigorous, open plant with shiny and slightly flecked fruit. Works best in the presence of some pollination. Uniform high quality fruit for early market. High yielding. Can get nine feet tall.
42088	Paycheck	42	7 - 8"	Medium Green	Zucchini	Cylindrical	CMV, PM, WMV, ZYMV	In eastern trials, it has shown good adaptability and excellent fruit quality. Works well in cooler conditions.
★ 42027	Spineless Beauty	50	7 ½ - 8 ½"	Medium Green	Zucchini	Cylindrical		Popular with growers due to lack of petiole spines, open plant habit, large yields, classy cylindrical fruit, and continuous setting ability.
★ 42094	Spineless Perfection	44	7 - 8"	Medium Green	Zucchini	Cylindrical	PM, WMV, ZYMV	A spineless variety that integrates more refined flecking onto a rich looking glossy fruit. Contains the "easy pick" characteristic meaning the fruit are easily twisted from the plant leaving the peduncle and fruit still intact.
42135	Starship	45	2 x 3 - 4"	Medium Dark Green	Scallop	Dish		A quality scallop squash that consistently maintains its shape and glossy dark green color through multiple harvests without rounding. A vigorous bush plant.

GROWER PREFERRED ALL-STARS ★ SUMMER SQUASH

GREEN

Dunja has the highest market share of any green zucchini that we offer. Ideal for those customers who want a darker skinned, glossy looking fruit. Dunja also has a comprehensive disease package for extended harvest.

For those that love oldies but goodies, **Spineless Beauty** is for you. The glossy, medium-green fruit is still one of the prettiest looking zucchini hybrids on the market today.

Spineless Perfection is quickly gaining traction with commercial growers. It demonstrates a similar style of classy fruit exterior as its forerunner, Spineless Beauty. It is simple to harvest due to an open plant habit and “easy pick” trait. Spineless Perfection also has an enhanced disease platform when compared to Spineless Beauty.

YELLOW

Blonde Beauty has proven itself over the last few year with growers. Growers have commented that it has a very smooth and productive plant with a classic shape.

When choosing a yellow zucchini hybrid, **Golden Glory** should be your go to variety...hands down. Wide-ranging package includes: small petiole spines, open plant, easy twist picking capabilities, and beautiful contrast between dark green handle and splendid dark yellow fruit. Grow Golden Glory in 2023.



Pete Dinius
Product Development

SQUASH SUMMER GREEN Hybrid

M=1,000 seeds

Price per package		100 Seeds	250 Seeds					
Price per 1,000 seeds (M)				1M	3M	25M	50M	55M
42092	Basima	10.95	18.20	52.00	45.20	43.45		42.45
42096	Dunja ^{FI400}	17.40	28.95	82.70	71.90	70.15	69.15	
	Green							
42009	Machine ^{FI400}	17.10	28.50	81.35	70.70	68.95	67.95	
42017	Kopana	31.30	52.10	148.85				
42088	Paycheck ^{FI400}	22.30	37.15	106.10	92.25	90.50		89.50
42027	Spineless Beauty ^{FI400}	15.35	25.55	72.95	63.40	61.65		60.65
42094	Spineless Perfection ^{FI400}	21.15	35.25	100.60	87.45	85.70		84.70
42135	Starship	8.45	14.05	40.10	34.85	33.10		32.10

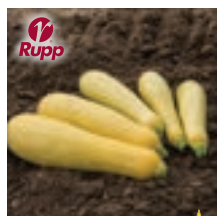
SQUASH SUMMER YELLOW Hybrid

M=1,000 seeds

Price per package		100 Seeds	250 Seeds				
Price per 1,000 seeds (M)				1M	5M	25M	80M
42018	Blonde Beauty ^{FI400}	12.45	20.75	59.20	51.45	49.70	48.70
42049	Grandprize ^{FI400}	17.65	29.35	83.85	72.90	71.15	70.15
42010	Sunburst ^{FI400}	14.80	24.60	70.25	61.05	59.30	58.30
Price per package		100 Seeds	250 Seeds				
Price per 1,000 seeds (M)				1M	3M	25M	80M
42133	Golden Glory ^{FI400}	17.70	29.45	84.05	73.05	71.30	70.30
42080	One Ball	14.35	23.90	68.15	59.25	57.50	56.50

SQUASH SUMMER OP

Priced per package		4 oz.		
Priced per pound in these package sizes		1#		5#
42112U	Dark Green Zucchini <small>Untreated</small>	9.95	26.25	26.00
42107U	Golden Zucchini <small>Untreated</small>	9.45	24.95	24.70



BLONDE BEAUTY★



GOLDEN GLORY★



GRANDPRIZE



ONE BALL



SUNBURST

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SQUASH		SUMMER YELLOW Hybrid					Pricing on page 96	
		Days	Harvest Length	Color	Type	Fruit Shape	Disease	Features
★	42018 Blonde Beauty	40	5 - 7"	Glossy Yellow	Straightneck	Tapered		Spineless petioles provide less painful picking on this hybrid from the Slickpick series. Standard commercial shape with an open plant makes a desirable package all around!
★	42133 Golden Glory	50	7 - 8"	Golden Yellow	Gold Zucchini	Cylindrical	PM, WMV, ZYMV	Produces high quality uniform fruit on an open, upright and vigorous plant.
	42049 Grandprize	42	6 - 7"	Yellow	Straightneck	Cylindrical	PM, WMV, ZYMV	Offers improved fruit coloring, great plant vigor, and solid yield potential. Solid outer texture to withstand harvest. Increased virus resistance over Goldprize.
	42080 One Ball	38	3 x 3"	Gold	Zucchini	Round		Fruit set at every node and grow very rapidly after flowering. Has occasional green fruit.
	42010 Sunburst	50	2 ½ x 3"	Bright Yellow	Scallop	Dish		AAS winner. Attractive, colorful fruit. Best when young.

SQUASH		SUMMER OP						
		Days	Harvest Length	Color	Type	Fruit Shape	Features	
	42112 Dark Green Zucchini	62	6 - 7"	Medium Dark Green	Zucchini	Cylindrical	Popular, medium dark green variety.	
	42107 Golden Zucchini	55	6 - 7"	Golden	Golden Zucchini	Cylindrical	Has crisp flesh on golden skinned fruit. A good choice for the home gardener.	



SQUASH WINTER

PLANTING

Plant seeds ½" - ¾" deep. Plant spacing varies depending on vine type. Bush type plants should be planted closer and vine types should be planted farther apart. Squash need to have approximately 25 - 30 sq. ft. See the Winter Squash Planting / Harvest Timing chart on page 100 for additional information.

See "Germination Chart" on page 125 for additional information on germination rate and days to germination at various soil temperatures.

MANAGEMENT

Scout every 7 days for insect, weed, and disease pressure. Fruit will tend to decrease in size the farther south a crop is planted and increase in size the farther north it is planted. Size is relative to day length.

HARVEST

Cut off the vine to keep peduncle. Wash in 5% chlorine solution and pat dry. Let cure for 10 days. Keep fruit dry to prevent spoilage. Allow air to circulate around fruit.

STORAGE

Store at 45 - 55°F and humidity level of 50 - 60%. Keep fruit dry and allow air to circulate around fruit.

PLANT SPACING

Each variety or type of squash has an optimum plant spacing for its best performance. If plants are too close, stress and competition can decrease fruit size and possibly even reduce the number of female flowers. Under extreme stress, tight spacing may eliminate the crop entirely.

- Accurate plant spacing will be an equal opportunity environment for every plant.
- Suggested populations are for final plant stands.
- To achieve ideal plant populations it is necessary to either over-plant and hand thin or to plant according to recommendations and hand plant later to fill skips.
- Seed corn maggots, wire worms, mice and birds, floods or lack of rain are all common problems that effect accurate stand establishment.

PLANT SPACING CHART

	Row Width	Distance Between Plants	Plants Per Acre
Compact Bush	5'	2'	4,356
Bush	5'	3'	2,904
Semi Bush	5'	4'	2,178
Restricted Vine	5'	4'	2,178
Vine	5'	5'	1,742



AUTUMN DELIGHT ★



AUTUMN PERFECTION



CELEBRATION ★













CREAM OF THE CROP



HARLEQUIN



HEART OF GOLD

SQUASH				WINTER ACORN						
	▲			Days	Fruit Size	Weight pounds	Color	Habit	Features	
★	42311	Autumn Delight	F1 pmt		80	6 x 5"	1 ½	Dark Green	Semi Bush	A popular, powdery mildew tolerant acorn hybrid. Fruit are large with excellent quality.
	42308	Autumn Perfection	F1 pmt		80	6 ½ x 5 ½"	2 - 2 ¼	Dark Green	Bush	Produces slightly larger fruit with improved taste when compared to Autumn Delight as the standard. Features high resistance to powdery mildew and better yields.
★	42955	Celebration	F1 pmt		80	4 x 5"	1 ½	Light Yellow / Orange Sutures	Compact Bush	A powdery mildew tolerant, gold striped acorn hybrid with exceptional eating quality. Is also decorative. A sure winner. A Rupp exclusive in cooperation with Cornell University.
	42304	Cream of the Crop	F1		85	6 x 5"	1 ½ - 2	Cream	Compact Bush	AAS winner. Unique creamy white fruit. Uniform size.
	42952	Harlequin	F1 pmt		80	4 x 5"	1 ½ - 2	Light Green / Dark Green Sutures	Compact Bush	A powdery mildew tolerant, green striped acorn hybrid from Rupp. Has exceptional eating and decorative qualities. A sure winner.
	42930	Heart of Gold	F1		80	4 x 5"	3	Cream / Green Stripes	Semi Bush	A winter squash striped like Sweet Dumpling, heart shaped, with fine sweet flesh. Yields have been 35% higher than Sweet Dumpling.
	42302	Mashed Potato			100	6 x 5"	1 - 1 ½	White	Compact Vine	White acorn with fantastic color holding ability. Flesh is nearly white and resembles mashed potatoes when baked and fluffed. 3 to 4 fruit per plant.
	42301	Table Ace	F1		80	6 x 5"	1 ½	Dark Green	Semi Bush	A popular, dark black-green, acorn squash with rounded ribs and blunted blossom ends. It has solid, tasty flesh with almost no fibers or stringiness.
	42310	Table Star	F1 pmt		80	6 x 5"	2	Jet Black with a golden star around the stem	Bush	A top selling acorn squash due to its eating quality and powdery mildew tolerance. It is competitive with the best in the market, plus has 50% higher sugars than other acorns.
	42309	Table Treat	F1		70	5 ½ x 5"	1 ½ - 1 ¾	Jet Black	Bush	A powdery mildew tolerant acorn hybrid from Rupp that is slightly smaller than Table Star, plus has 50% higher sugars than the comparable acorns. Very good eating quality.
	42307	Taybelle PM	F1		80	6 x 5"	2	Jet Black	Bush	A direct conversion from Taybelle to include intermediate resistance to powdery mildew. Sweet flavor and good storage quality.

SQUASH WINTER ACORN				M=1,000 seeds			
Priced per package		1 oz.	4 oz.				
Priced per pound in these package sizes				1#	5#	20#	Seeds /lb.
42309	Table Treat	10.25	31.75	87.00	86.00	84.50	4,600
Priced per package		250 Seeds					
Price per 1,000 seeds (M)		1M	3M	25M	55M		Seeds /lb.
42311	Autumn Delight	19.30	51.35	48.35	46.35	45.35	4,300
42311	Autumn Delight ^{F1400}	20.45	54.50	51.50	49.50	48.50	4,300
42311U	Autumn Delight ^{Untreated}	19.30	51.35	48.35	46.35	45.35	
42308	Autumn Perfection ^{F1400}	20.20	53.75	50.75	48.75	47.75	
42955	Celebration	12.90	34.30	31.30	29.30	28.30	4,800
42955	Celebration ^{F1400}	14.05	37.45	34.45	32.45	31.45	4,800
42304	Cream of the Crop	14.00	37.25	34.25	32.25	31.25	4,000
42304	Cream of the Crop ^{F1400}	15.15	40.40	37.40	35.40	34.40	4,000

SQUASH WINTER ACORN				M=1,000 seeds			
Priced per package		250 Seeds					
Price per 1,000 seeds (M)		1M	3M	25M	55M		Seeds /lb.
42952	Harlequin	12.30	32.70	29.70	27.70	26.70	4,400
42930	Heart of Gold	14.10	37.50	34.50	32.50	31.50	4,900
42930	Heart of Gold ^{F1400}	15.25	40.65	37.65	35.65	34.65	4,900
42302	Mashed Potato	16.55	44.10	41.10	39.10	38.10	5,900
42301	Table Ace	15.55	41.35	38.35	36.35	35.35	4,400
42301	Table Ace ^{F1400}	16.70	44.50	41.50	39.50	38.50	4,400
42301U	Table Ace ^{Untreated}	15.55	41.35	38.35	36.35	35.35	4,400
42310	Table Star	11.75	31.30	28.30	26.30	25.30	3,900
42310	Table Star ^{F1400}	12.95	34.45	31.45	29.45	28.45	3,900
42307	Taybelle PM ^{F1400}	16.65	44.35	41.35	39.35	38.35	4,300

WINTER SQUASH PLANTING/HARVESTING TIMING CHART

Winter squash growers who are planting multiple varieties need to consider multiple planting dates so that they can harvest their crop at its peak. The planting date plus the maturity of the variety should equal the potential harvest date. Keep in mind that higher or lower than average heat and sunlight may also impact the development of the crop by decreasing or increasing its maturity.

Use the following chart to align your squash variety maturity with your desired harvest date to schedule planting.

Variety Maturity	Planting Date: May 1 Harvest Range	Planting Date: May 15 Harvest Range	Planting Date: June 1 Harvest Range	Planting Date: June 15 Harvest Range	Planting Date: July 1 Harvest Range
70	July 1 - July 20	July 14 - Aug. 3	Aug. 1 - Aug. 20	Aug. 14 - Sept. 3	Aug. 31 - Sept. 19
75	July 5 - July 25	July 19 - Aug. 8	Aug. 5 - Aug. 25	Aug. 19 - Sept. 8	Sept. 4 - Sept. 24
80	July 10 - July 30	July 24 - Aug. 13	Aug. 10 - Aug. 30	Aug. 24 - Sept. 13	Sept. 9 - Sept. 29
85	July 15 - Aug. 4	July 29 - Aug. 18	Aug. 15 - Sept. 4	Aug. 29 - Sept. 18	Sept. 14 - Oct. 4
90	July 20 - Aug. 9	Aug. 3 - Aug. 23	Aug. 20 - Sept. 9	Sept. 3 - Sept. 23	Sept. 19 - Oct. 9
95	July 25 - Aug. 14	Aug. 8 - Aug. 28	Aug. 25 - Sept. 14	Sept. 8 - Sept. 28	Sept. 24 - Oct. 14
100	July 30 - Aug. 19	Aug. 13 - Sept. 2	Aug. 30 - Sept. 19	Sept. 13 - Oct. 3	Sept. 29 - Oct. 19
105	Aug. 4 - Aug. 24	Aug. 18 - Sept. 7	Sept. 4 - Sept. 24	Sept. 18 - Oct. 8	Oct. 4 - Oct. 24
110	Aug. 9 - Aug. 29	Aug. 23 - Sept. 12	Sept. 9 - Sept. 29	Sept. 23 - Oct. 13	Oct. 9 - Oct. 29
115	Aug. 14 - Sept. 3	Aug. 28 - Sept. 17	Sept. 14 - Oct. 4	Sept. 28 - Oct. 18	Oct. 14 - Nov. 3
120	Aug. 19 - Sept. 8	Sept. 2 - Sept. 22	Sept. 19 - Oct. 9	Oct. 3 - Oct. 23	Oct. 19 - Nov. 8

Squash quality will be the best when harvested nearest to the variety's actual maturity.

First, select the maturity of the variety you are using, then pick the date you would like your squash to look the freshest. The required planting date will be at the top of the column.

GROWER PREFERRED ALL-STARS ★ WINTER SQUASH

These winter squash All-Stars continue to bring growers consistent, predictable performance.

ACORN

With great dark color, good storage abilities and zero to very little ground spot, **Autumn Delight** is a sure winner for both fresh market and shipper growers.

Celebration is a must have for your autumn displays. Color, color, color!

BUTTERCUP

For that classic look, **Autumn Cup** is your choice. It is a great compliment to Thunder for seasonal markets.

For your short term storage needs **Space Station** is out of this world for quality and yield.

What can we say about **Thunder** but yield, yield, yield! Sure to put plusses in your income column.

George Wonnacott
Vegetable Consultant

BUTTERNUT

Betternut 900 has quickly become the standard in the boxing trade. It also carries other qualities such as taste, sweetness, vitamins, and minerals for today's nutritional needs.

Ultra will give you a large yield with huge fruit that work whether you're a processor or fresh market grower.

DELICATA

Sweet Lightning is a great choice when you want great looking fall decorations. When it's cooked it provides the consumer with one of the sweetest eating squash on the market today. A great "dual-purpose" variety.

HUBBARD

When you want to attract customers to your market, **Blue Hubbard New England** is the one. It exudes great looks, an attractive interior and distinctive hubbard flavor.

SPAGHETTI

If it's spaghetti squash you're looking for, then **Primavera** is the variety to pick. Uniformity, yield, and great color make this a grower favorite.

OTHER

Galeuse d'Eysines is also known as "The Peanut Squash". Customers can't believe its unusual looks, but they enjoy its delicious squash flavor when fried up in a pan with butter.

Marina de Chioggia is a unique green warted squash that adds variety to your fall display, but also eats very well. It was bred for use in gnocchi and ravioli.

Rupp's Turk's Turban has great fall colors on a large orange squash. Customers will be asking for this beauty by name so have lots available.





MASHED POTATO



TABLE ACE



TABLE STAR



TABLE TREAT

ORDERS
OVER \$350
ARE SHIPPED
FREE!



AUTUMN CUP ★



SPACE STATION ★



SUNSHINE








SUN SPOT



SWEET MAMA



THUNDER ★

SQUASH			WINTER BUTTERCUP / KABOCHA					
▲			Days	Fruit Size	Weight pounds	Color	Habit	Features
★	42935	Autumn Cup ^{F1} 	95	6"	4 ½	Dark Green	Semi Bush	The first hybrid, semi bush buttercup squash. Dark green, very high quality flesh and high yields. Has a reduced button when compared to Burgess and is slightly more oval.
	42904	Buttercup Burgess	110	8 - 9 x 5"	3	Dark Green	Vine	Flesh is dry and sweet, good for storage, fresh market or garden.
★	42962	Space Station ^{F1} 	90	7 x 4"	3 ½	Black Green	Semi Bush	A semi bush kabocha hybrid with excellent flesh color and quality. Flesh is very sweet and dry. An upgrade to the long used Sweet Mama.
	42902	Sunshine ^{F1}	95	7 x 5"	3 - 5	Bright Orange	Vine	Tender flesh is smooth, sweet, and bright orange for baking, mashing, and pies. Appearance and eating quality are superior to other varieties of this type. Average 3 - 4 fruit per plant.
	42966	Sun Spot ^{F1} 	75	6 x 4"	1 ½	Dark Red	Vine	A dark red buttercup hybrid with excellent dry flesh and fruit size that is desirable for today's small household. Early, dark orange, tasty flesh.
	42905	Sweet Mama ^{F1} 	85	8 - 9 x 5"	4	Dark Green	Semi Bush	AAS winner. A kabocha with sweet flavor that stores well.
★	42968	Thunder ^{F1} 	85	7 x 4"	3 ½	Black Green	Vine	A buttercup (kabocha) hybrid that is an excellent yielder with dry sweet flesh.

SQUASH WINTER BUTTERCUP / KABOCHA				M=1,000 seeds		
Priced per package		1 oz.	4 oz.			
Priced per pound in these package sizes				1#	5#	20#
42904	Buttercup Burgess	5.25	15.50	42.20	41.20	39.70
42905	Sweet Mama F1400	28.25	91.25	251.30	250.30	248.80

SQUASH WINTER BUTTERCUP / KABOCHA		M=1,000 seeds				
Priced per package		250 Seeds				
Price per 1,000 seeds (M)		1M	3M	25M	55M	
42935	Autumn Cup	27.55	73.35	70.35	68.35	67.35
42935	Autumn Cup ^{F1400}	28.70	76.50	73.50	71.50	70.50
42962	Space Station	36.25	96.60	93.60	91.60	90.60
42962	Space Station ^{F1400}	37.45	99.75	96.75	94.75	93.75
42962U	Space Station ^{Untreated}	36.25	96.60	93.60	91.60	90.60
42902	Sunshine	24.40	65.00	62.00	60.00	59.00
42966	Sun Spot	25.80	68.70	65.70	63.70	62.70
42966	Sun Spot ^{F1400}	26.95	71.85	68.85	66.85	65.85
42968	Thunder	28.65	76.30	73.30	71.30	70.30
42968	Thunder ^{F1400}	29.80	79.45	76.45	74.45	73.45



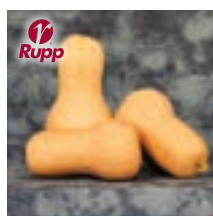
BETTERNUT 23



BETTERNUT 401



BETTERNUT 900 ★



BETTERNUT 1744














BUTTERBABY



HONEYNUT

SQUASH

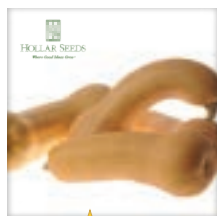
WINTER BUTTERNUT

		Days	Fruit Size	Weight pounds	Color	Habit	Features
42613	Avalon ^{F1} 	88	11"	4 - 5	Buff	Vine	<i>This Hollar Seeds butternut is a good packing and high yielding variety.</i>
42606	Betternut 23 ^{F1}  	105	12 - 15"	6 - 8	Buff	Vine	<i>Powdery mildew tolerant. Very uniform variety with proportional neck to bulb ratio. Exceptional flesh and skin color. High percentage of dry matter and sugar content.</i>
42614	Betternut 401 ^{F1}  	80	8 - 9"	2 ¾	Light Tan	Semi Bush	<i>A hybrid with good flesh color and uniformity on a semi bush plant. Powdery mildew tolerant.</i>
★ 42622	Betternut 900 ^{F1}  	80	8 - 9"	3	Light Tan	Semi Bush	<i>Overall best variety in the Betternut series for boxing. Powdery mildew tolerant.</i>
42976	Betternut 1744 ^{F1}  	80	8 - 9"	3 ¼	Light Tan	Semi Bush	<i>Slightly larger than Betternut 900 for farm markets and roadside stands. Provides powdery mildew tolerance.</i>
42607	Butterbaby 	100 - 105	5 - 6"	½ - 1	Buff	Semi Bush	<i>High eating quality variety that is perfect size for CSA box growers and personal-sized market. Very nice color and shape while maturing earlier than Honeynut. Longer storage ability than Honeynut.</i>
42702	Honeynut	105 - 110	4 - 5"	½ - 1	Dark Tan	Restricted Vine	<i>Produces single-serving squash with very sweet and delicious flavor. Very high yielding.</i>
★ 42615	Ultra ^{F1} 	90	15"	10	Light Tan	Vine	<i>A high yielding large butternut for both processors and market gardeners.</i>

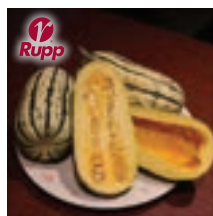
SQUASH WINTER BUTTERNUT

M=1,000 seeds

Priced per package		250 Seeds					
Price per 1,000 seeds (M)		1M	3M	25M	100M	Seeds /lb.	
42613	Avalon ^{F1400}	20.85	55.50	52.50	50.50	49.50	5,000
42606	Betternut 23	15.45	41.10	38.10	36.10	35.10	5,000
42606	Betternut 23 ^{F1400}	16.60	44.25	41.25	39.25	38.25	5,000
42614	Betternut 401	14.95	39.75	36.75	34.75	33.75	6,000
42614	Betternut 401 ^{F1400}	16.10	42.90	39.90	37.90	36.90	6,000
42622	Betternut 900	16.80	44.80	41.80	39.80	38.80	4,600
42622	Betternut 900 ^{F1400}	18.00	47.95	44.95	42.95	41.95	4,600
42622U	Betternut 900 ^{Untreated}	16.80	44.80	41.80	39.80	38.80	4,600
42976	Betternut 1744	14.65	39.00	36.00	34.00	33.00	5,000
42976	Betternut 1744 ^{F1400}	15.85	42.15	39.15	37.15	36.15	5,000
42607	Butterbaby ^{F1400}	14.60	38.85	35.85	33.85	32.85	5,800
42702	Honeynut	12.00	32.00	29.00	27.00	26.00	
42615	Ultra ^{F1400}	21.55	57.35	54.35	52.35	51.35	4,500



ULTRA ★



BUSH DELICATA



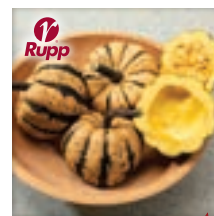
JESTER









FESTIVAL



SWEET LIGHTNING ★



UGLY DUMPLING 🚫

SQUASH		WINTER DELICATA / SWEET DUMPLING					
		Days	Fruit Size	Weight pounds	Color	Habit	Features
42957	Bush Delicata 	105	5 - 6"	2	White / Green Stripes	Bush	An AAS winner bred by Cornell and marketed by Rupp. A typical delicata fruit on a bush plant with strong tolerance to powdery mildew.
42931	Delicata	100	5 - 6"	2 - 3	Green / White Stripes	Vine	CROP FAILURE Colorful with fine grained, sweet flesh. An improved strain with better fruit shape.
42945	Festival ^{F1}	100	4 - 5"	1 ½ - 2	Yellow Green Orange	Vine	CROP FAILURE A Carnival type squash with fewer oversized fruit, similar color and flesh quality. Fruit shape is between an acorn and Sweet Dumpling. Highly ornamental with great eating quality.
42933	Jester ^{F1}	95	5 - 7"	1 ½	Ivory / green inter-rib stripes	Short Vines	Superb flavor with eye-catching fruit. Oval and tapered at both ends, with small to average ribs. Among the best in eating quality. About 60 days storage time.
42911	Sweet Dumpling 	100	4"	1	Cream Striped	Vine	CROP FAILURE Colorful, acorn shape, sweet flesh. Stores 3 - 4 months.
★ 42501	Sweet Lightning ^{F1 pmt}  	100	3 x 5"	1 - 1 ¼	Pale Yellow / Orange Stripes	Semi Bush	A Rupp product with both outstanding decorative and eating qualities. Is one of the best flavored when used as a squash. Has powdery mildew tolerance on a semi-bush vine.
🚫 42934	Ugly Dumpling ^{F1}  	100	2 ½ x 3 ¾	¾ - 1	Tan / Green Stripes	Semi Bush	While at first glance it may not have great eye appeal, our trial partners tell us its one of the best tasting winter squash they've ever tried, and its unique appearance makes it an option for fall decoration too.

SQUASH WINTER DELICATA / SWEET DUMPLING

Priced per package		1 oz.	4 oz.				
Priced per pound in these package sizes					1#	5#	25#
42931	Delicata	Crop Failure					
42945	Festival	Crop Failure					
42911	Sweet Dumpling ^{F1400}	Crop Failure					
Priced per package		250 Seeds	M=1,000 seeds				
Price per 1,000 seeds (M)			1M	3M	25M	100M	
42957	Bush Delicata	12.85	34.20	31.20	29.20	28.20	
42957	Bush Delicata ^{F1400}	14.05	37.35	34.35	32.35	31.35	
42933	Jester	17.15	45.70	42.70	40.70	39.70	
42501	Sweet Lightning	22.05	58.80	55.80	53.80	52.80	
42501	Sweet Lightning ^{F1400}	23.25	61.95	58.95	56.95	55.95	
42934	Ugly Dumpling ^{F1400}	24.05	64.05	61.05	59.05	58.05	



HEAVENLY
HUBBARD

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Natural

VEGETABLE ROOT INOCULANT

Natural™ for Vegetables contains proprietary and patent pending biologicals that colonize the root system of plants. Crop stress such as disease and dry weather can be alleviated, and often systemically, so that root colonization by this treatment can affect the physiology of the whole plant resulting in higher yields. See page 123 for application rates and pricing.

SQUASH

WINTER HUBBARD

		Days	Fruit Size	Weight pounds	Color	Habit	Features
42906	Blue Hubbard	110	7 x 12"	12 - 14	Blue Gray	Vine	A popular hubbard type with thick, orange, fine textured, sweet flavored flesh. Claimed by some to be the best of all hubbards.
★ 42918	Blue Hubbard New England	120	20 - 30"	30 - 45	Blue Gray	Vine	Largest of the hubbards. Flesh is orange with fine texture and flavor. Rupp produced.
42944	Blue Magic ^{F1}	100	5 x 6"	5 - 7	Blue Gray	Vine	Miniature Blue Hubbard hybrid for those that love the hubbard flavor but are overwhelmed with the normal Blue Hubbard size. Has a true hubbard shape.
42908	Chicago Warted	115	10 x 13"	12 - 14	Green Black	Vine	Large warts, flesh is rich, fine grained and dry. Use for market or garden.
42907	Golden Delicious	100	7 x 14"	10	Red Orange	Vine	Rind is hard and smooth. Flesh is dry, fine grained, and good quality. Used primarily as a processing squash.
42926	Golden Hubbard	110	11 x 9"	10	Orange	Vine	Slightly smaller than most hubbards, slightly warted, orange color with tan stripes toward blossom end.
42909	Green True	105	9 x 12"	12 - 14	Dark Green	Vine	Good shipper and keeper.
42977	Heavenly Hubbard ^{F1}	100	12 x 15"	15 - 20	Blue Gray	Vine	A Hubbard hybrid with thick, fine textured flesh and sweet flavor.
42919	Uchiki Kuri	90	7 x 7"	2 ½	Orange Red	Vine	Improved smooth Hubbard selection with almost no ribbing on the fruit. Flesh is very sweet and nutty in flavor.

SQUASH WINTER HUBBARD

M=1,000 seeds

	Priced per package		Priced per pound in these package sizes		
	1 oz.	4 oz.	1#	5#	25#
42906 Blue Hubbard	4.75	14.50	39.50	38.50	37.00
42918 Blue Hubbard New England	8.00	25.00	68.80	67.80	66.30
42944 Blue Magic	14.75	46.75	128.50	127.50	126.00
42908 Chicago Warted	4.25	13.25	36.10	35.10	33.60
42907 Golden Delicious	4.75	14.50	39.50	38.50	37.00
42926 Golden Hubbard	4.75	14.50	39.50	38.50	37.00
42909 Green True	4.75	14.50	39.50	38.50	37.00
42919 Uchiki Kuri	14.25	44.75	123.05	122.05	120.55
	Priced per package		Price per 1,000 seeds (M)		
	250 Seeds		1M	3M	25M 55M
42977 Heavenly Hubbard	48.45	129.20	126.20	124.20	123.20



PINNACLE






PRIMAVERA ★



VEGETABLE SPAGHETTI

ORDERS
OVER \$350
ARE SHIPPED
FREE!

SQUASH		WINTER SPAGHETTI					
▲		Days	Fruit Size	Weight pounds	Color	Habit	Features
42950	Pinnacle ^{F1} 	85	7 x 5"	3	Bright Yellow	Semi-Bush	Spaghetti squash with a semi-bush plant habit, that allows higher plant densities and higher yields per acre. Fruit ripen to an appealing bright yellow color. The spaghetti strands are fine and have the nutty flavor of a true Spaghetti Squash.
★ 42946	Primavera ^{F1} 	90 - 95	5 ½ x 10"	2 ½ - 3	Canary Yellow	Restricted Vine	A high yielding Sakata hybrid with good uniformity and attractive color.
42903	Spaghetti	105	8 - 10"	2 ½ - 3	Light Yellow	Vine	A uniform, purified strain by Hollar. Is slightly smaller and will be an excellent fit for the commercial grower. Good keeper, low-calorie spaghetti squash. Market or garden.
42929	Stripetti ^{F1}	95	12"	4	Tan with Green Stripes	Vine	Spaghetti squash in a unique package. Interior "noodles" are just like vegetable spaghetti but are sweeter and better tasting. Striped, cream colored rind turns orange when well ripened. A very uniform hybrid.
42981	Vegetable Spaghetti ^{Sakata} 	100	5 ½ x 10"	2 ½	Creamy Yellow	Vine	Sakata's popular OP spaghetti squash introduced years ago. Long, oval shaped with noodle-like strands inside when cooked.

SQUASH WINTER SPAGHETTI		M=1,000 seeds				
Priced per package		1 oz.	4 oz.			
Priced per pound in these package sizes				1#	5#	25#
42903	Spaghetti	7.00	21.75	60.00	59.00	57.50
42981	Vegetable Spaghetti ^{Sakata FI400}	10.75	34.25	93.85	92.85	91.35
Priced per package		250 Seeds				
Price per 1,000 seeds (M)			1M	3M	25M	Seeds /lb.
42950	Pinnacle ^{FI400}	36.40	97.00	76.35	75.85	2,600
42946	Primavera ^{FI400}	28.15	74.95	59.00	58.50	3,500
42929	Stripetti	26.65	71.00	55.90	55.40	5,900



MARINA DE
CHIOGGIA ★



GALEUSE
D'EYSINES ★



RUPP'S TURK'S
TURBAN ↗



TINY TURK



FULL SUN
IMPROVED



GOLDY DOUBLE **NEW**

SQUASH

WINTER OTHER

Pricing on page 127

		Days	Fruit Size	Weight pounds	Color	Habit	Features
42989	Autumn Frost	100-105	5-7" x 5-6"	2 - 3	Dark Tan	Medium Vine	Uniquely ribbed, round fruit ripens to dark tan with a frosted overlay. Fruit is similar in taste to a butternut, with superior quality, rich flavor and a shelf life of up to 4 months after maturity, allowing for a supply of high-quality fruit throughout the winter season. Also adds a nice variety to fall displays. Intermediate resistance to powdery mildew.
42901	Banana Pink Jumbo	105	20"	15	Pink / Orange	Vine	Thick, fine grained, light orange flesh. Delicious flavor.
★ 42971	Galeuse d'Eysines	100	6 1/2 x 11"	18	Pink	Vine	A warty squash from France with ornamental value plus delicious when fried in butter.
42948	Georgia Candy Roaster	110	2 1/2 - 3'	up to 60	Pink / Orange	Vine	A long, narrow fruited heirloom that is known for its outstanding baking quality. One of the sweetest and tastiest. Enough for the entire village.
★ 42970	Marina de Chioggia	100	7 x 11"	11	Green warted	Vine	A unique green warted squash from Italy with ornamental value. Bred to be used in gnocchi and ravioli.
↗ 26017	Rupp's Turk's Turban	110	15 x 10	16-45	Orange, Green and White	Vine	Large ornamental turban.
26024	Tiny Turk	100	4 x 5"	1 1/2 - 3	Orange, Green and White	Vine	A smaller selection of Turk's Turban. Used primarily as decoration.
42938	Tricolor Cushaw	110	Large Curved Neck	5 - 10	Gold / Dark Gold Stripes	Vine	Beautiful bright orange squash. Same flesh qualities as other cushaw types. A resurrected old variety.
26007	Turk's Turban	100	7 x 8"	3 - 4	Orange, Green and White	Vine	An ornamental and edible squash/gourd. Attractive for displays. Keeps well.

SQUASH WINTER OTHER

M=1,000 seeds

	Priced per package	M=1,000 seeds				
		1 oz.	4 oz.	1#	5#	25#
42901	Banana Pink Jumbo	7.25	22.25	60.80	59.80	58.30
42948	Georgia Candy Roaster	7.50	23.75	65.50	64.50	63.00
26024	Tiny Turk	7.25	23.00	63.00	62.00	60.50
42938	Tricolor Cushaw	7.25	23.00	62.90	61.90	60.40
26007	Turk's Turban	7.00	21.75	59.40	58.40	56.90
	Priced per package	250 Seeds				
		1M	3M	25M	55M	
42989	Autumn Frost	28.95	77.15	74.15	72.15	71.15
42971	Galeuse d'Eysines	25.90	69.00	66.00	64.00	63.00
42971U	Galeuse d'Eysines Untreated	25.90	69.00	66.00	64.00	63.00
42971	Galeuse d'Eysines FI400	27.10	72.15	69.15	67.15	66.15
42970	Marina de Chioggia	30.65	81.70	78.70	76.70	75.70
42970U	Marina de Chioggia Untreated	30.65	81.70	78.70	76.70	75.70
42970	Marina de Chioggia FI400	31.85	84.85	81.85	79.85	78.85
26017	Rupp's Turk's Turban FI400	20.45	54.50	51.50	49.50	48.50

		Days	Features
47007	Full Sun Improved	60-100	A single stem with dark yellow petals and dark disc, 68 - 84 inches tall. Seed spacing will affect plant height and head size. For shorter stems (6') and smaller heads (5") - plant 4" apart. For taller stems (7-8') and larger heads (7") - plant 6" apart.
47005	Giant Striped	80	Excellent confectionery type variety. Striped, plump seeds are well filled and have thin hulls. 6 - 12' tall. Plant at 3-4 pounds per acre.
NEW 47010	Goldy Double	45-50	Goldy Double is 60-72" tall, with 18-24" stems with large fully double 5-7" blooms with green to yellow centers. Produced on sturdy branching plants with minimal pollen.
47016	Lemon Queen	70	6 - 7' tall with 5" blooms, pale lemon-yellow with dark centers. Free flowering and multiple branched with strong stems are ideal for cut flowers or borders.
47014	Sunspot Dwarf	55	1 - 2' tall with a full size yellow flower of 10". Does well in the garden or in 8 - 10" pots. Large seed.
47015	Velvet Queen	70	5' tall with 5" velvety blooms that are burgundy, chestnut and bronze with a dark center. Well branched, multiple flowered, free flowering plants with strong stems which are ideal for cut flowers or borders.

Additional Cut Sunflowers and Zinnias can be found on the next page --->.

SUNFLOWER

M=1,000 seeds

Priced per package		1 oz.	4 oz.			
Priced per pound in these package sizes				1#	5#	50#
47005U	Giant Striped Untreated		7.95	14.40	13.90	13.65
47016U	Lemon Queen Untreated	5.05	16.40	46.15	45.15	
47014U	Sunspot Dwarf Untreated	5.05	16.40	46.15	45.15	
47015U	Velvet Queen Untreated	5.05	16.40	46.15	45.15	

Pricing for Sunflowers and Zinnias continues on page 109 --->.





PROCUT BICOLOR



PROCUT PLUM



PROCUT RED



PROCUT
WHITE LITE



PROCUT
WHITE NITE



PROCUT
HORIZON



PROCUT
ORANGE EXCEL



SUNFILL GREEN



SUNFILL PURPLE



SUNRICH GOLD



SUNRICH LEMON



SUNRICH LIME

SUNFLOWER & CUT FLOWERS

Pricing on page 109

		Days	Features
Cut Flowers			
ProCut Series Sunflowers			
ProCut Series Sunflowers are early maturing, pollenless hybrids. Plants are strong single stems that are 60 - 72” high with 4 - 6” blooms. All of the ProCut varieties are day length neutral.			
47037	ProCut Bicolor	50-60	When you think about autumn colors you have to include ProCut Bicolor. A splash of bronzy red on orange tipped petals. It is the best single stem cutting bicolor sunflower available to growers.
47036	ProCut Horizon	45-55	A brand new ProCut variety, with rich overlapping orange petals surrounding a traditional dark disc, with perfect upward facing blooms.
47035	ProCut Orange Excel	45-55	The next generation of ProCut series. Deep orange color with upright flowers.
47033	ProCut Plum	50-60	Is it pink? Rose? Mauve? Unique plum colored petals.
47034	ProCut Red	50-60	The latest breakthrough in sunflowers! Deep burgundy colored petals.
47031	ProCut White Lite	50-60	Lush white petals border a light colored center disc. An excellent choice paired with other flowers in bouquets.
47032	ProCut White Nite	50-60	White petals with a dark center. With unlimited possibilites. Can even be dyed red and blue for a July 4th vase.
47080	ProCut Blend	45-60	A blend of the five most popular ProCut Sunflower Series. Plum, Red, White Nite, Horizon and Orange Excel
SunFill Series Sunflowers			
47041	SunFill Green	55-60	SunFill Series Sunflowers are a unique, novel green and purple sunflower. Fast growing sunflower that produces a 3-4” geometric flower head for use as bouquet greenery. They have highly ornamental sepals that wrap the flower face, creating a look typically only found on the back of the flower. Pollenless, single stem. Ht: 60-72”. Should be cut early.
47042	SunFill Purple	55-60	
Sunrich Series Sunflowers			
47001	Sunrich Gold	55-70	Sunrich Series Cut Sunflowers. An early, male sterile, pollenless sunflower used exclusively for the cut flower market. A 48” - 60” plant when cut will have a height of 2 - 2 ½ feet, with a 5 - 6” flower. Works best if direct sown with a 5” spacing. Need to keep a dense planting. Over fertilizing will cause the flower to grow too big for floral purposes.
47002	Sunrich Lemon	55-70	
47006	Sunrich Lime	55-70	
47003	Sunrich Orange	55-70	
47070	Sunrich Blend	50-70	A blend of the five Sunrich Sunflower Series.
47004	Sunrich Limoncello Summer	50-65	An early variety in the Sunrich series. Flowers 5 to 10 days earlier than the Gold, Lemon and Orange. A unique bi-color flower, vibrant yellow changing to a light, creamy yellow tip.
Zinnia			
50001	Benary Giant Zinnia Mix	63-70	Undeniably the most eye catching Zinnia mix available for cut flower growers. Vigorous plants producing attractive brightly colored blooms in 12 colors: Lilac, Salmon Rose, Carmine Rose, Golden Yellow, Orange, Deep Red, White, Purple, Bright Pink, Coral, Wine and Scarlet.
NEW 50002	Up roar Rose Zinnia	70-80	Tall-growing, well-branched Zinnia with bright rose 4-5” double blooms. Very uniform 28-36” height. A prized cut flower.



SUNRICH ORANGE



SUNRICH
LIMONCELLO
SUMMER



BENARY GIANT
MIX



UPROAR ROSE **NEW**



SUPER VERDE

SWISS CHARD

	Days	Features
43006 Celebration	60	CROP FAILURE A multi-colored chard. It exhibits highly uniform plants with dark green, glossy leaves. It has vibrant multi-colored petioles and venations with high percentage of pink, yellow and orange chards. Great for producing full-sized specialty chard or baby leaf.
43004 Five Color <small>Australian Heirloom</small>	60	Offers growers a rainbow of stem colors: yellow, gold, orange, pink, violet, green, white, red or striped, plus green, dark green or bronze leaf colors. Has improved tenderness and a mild chard flavor. Can be used fresh as a miniature leaf in salads or cooked when more mature.
43002 Rhubarb	60	Unique crimson stalks look like rhubarb. Dark green, heavily crumpled leaves have delicious flavor.

TOMATILLO

	Days	Features
44530 Super Verde	80	A green hybrid tomatillo that has mid maturity, plus a nice plant with strong vigor and cover. Fruit set is very good and offers improved uniformity, yield potential and longer cycle production. Fruit are firm, have healthy husks, attractive green color and above average shelf life.

SUNFLOWER

M=1,000 seeds

		500 Seeds			
		Priced per package			
		Price per 1,000 seeds (M)	1M	5M	
Cut Flowers					
47010U	Goldy Double	Untreated	16.75	26.25	23.65
47007U	Full Sun Improved	Untreated	26.00	41.25	37.30
47037U	ProCut BiColor	Untreated	20.25	32.00	28.90
47036U	ProCut Horizon	Untreated	20.25	32.00	28.90
47035U	ProCut Orange Excel	Untreated	20.25	32.00	28.90
47033U	ProCut Plum	Untreated	20.25	32.00	28.90
47034U	ProCut Red	Untreated	22.75	36.00	32.55
47031U	ProCut White Lite	Untreated	28.25	44.50	40.45
47032U	ProCut White Nite	Untreated	28.25	44.50	40.45
47080U	ProCut Blend	Untreated	29.00	45.75	36.50
47041U	SunFill Green	Untreated	28.25	44.50	40.45
47042U	SunFill Purple	Untreated	28.25	44.50	40.45
47001U	Sunrich Gold	Untreated	26.00	41.00	37.05
47002U	Sunrich Lemon	Untreated	26.00	41.00	37.05
47006U	Sunrich Lime	Untreated	26.00	41.00	37.05
47004U	Sunrich Limoncello Summer	Untreated	26.00	41.00	37.05
47003U	Sunrich Orange	Untreated	26.00	41.00	37.05
47070U	Sunrich Blend	Untreated	32.50	51.25	40.95

SUNFLOWER

M=1,000 seeds

	<i>Priced per package</i>	250 Seeds		
	<i>Price per 1,000 seeds (M)</i>		1M	5M
Zinnia				
50001U	Benary Giant Zinnia Mix <small>Untreated</small>	14.25	37.75	34.15
50002U	Uproar Rose Zinnia <small>Untreated</small>	47.25	126.00	100.80

SWISS CHARD

M=1,000 seeds


	Priced per package Priced per pound in these package sizes	4 oz.		
		1#	5#	25#
43004U Five Color <small>Untreated</small>	13.30	34.65	34.40	33.90
43002U Rhubarb <small>Untreated</small>	9.35	24.40	24.15	23.65
	Priced per 1,000 seeds in these package sizes	10M		
		25M	250M	1000M
43006 Celebration		Crop Failure		

TOMATILLO

M=1,000 seeds

	Priced per package Price per 1,000 seeds (M)	100 Seeds		500 Seeds	
		1M	5M	25M	100M
44530 Super Verde	4.50	15.00	23.95	20.80	18.90
				18.90	18.00



STM2255  pg. 113

TOMATOES

PLANTING

Sow in greenhouse 4 - 6 weeks before desired planting date. Allow plants to adjust to field conditions for 48 hours before transplanting. Plant transplants up to 6 inches deep.

See "Germination Chart" on page 125 for additional information on germination rate and days to germination at various soil temperatures.

MANAGEMENT

Staking and pruning plants are an important management practice. Staking and pruning allows the plant to concentrate on fruit development and also ensures less damage when harvesting fruit. Staking also keeps fruit from setting on the ground. Grow plants on raised beds with drip irrigation. Scout weekly to ensure crop quality. Consult Midwest Vegetable Production Guide on identification and treatment.

www.ruppseeds.com/MVPG

HARVEST

Harvest tomatoes when 60 - 90% red for fresh markets. Consult your buyers on what stage they would like their tomatoes harvested. However, please note that the more red the tomato the shorter the shelf life.

STORAGE

Store at 50 - 60°F and 85 - 95% humidity to ensure the longest shelf life.

DISEASE CODES

ASC - Alternaria Stem Canker
BLS - Bacterial Leaf Spot
BS - Bacterial Spec
BW - Bacterial Wilt
EB - Early Blight
FCR - Fusarium Crown Rot
Ff - Leaf Mold
FR - Fusarium Race #
GLS - Gray Leaf Spot
N - Nematodes
PM - Powdery Mildew
PVY - Potato Virus Y
TMV - Tobacco Mosaic Virus
ToMV - Tomato Mosaic Virus
TYLC - Tomato Yellow Leaf Curl
SW - Spotted Wilt
SBW - Southern Bacterial Wilt
VW - Verticillium Wilt

USE

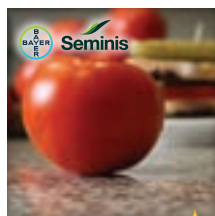
BP - Bedding Plant
HG - Home Garden
FM - Fresh Market
S - Shipping
P - Processing

TERMS

GS - Green Shoulders
LGS - Light Green Shoulders when ripe
UG - Uniform Green Gene ripe fruit are a uniform color
DT - Determinate restricted vine or bush
INDT - Indeterminate vining type used primarily in home gardens



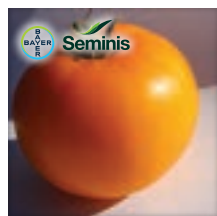
BETTER BOY PLUS



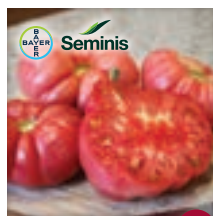
CELEBRITY PLUS ★



EARLY GIRL PLUS NEW



LEMON BOY PLUS



PINK DELICIOUS NEW

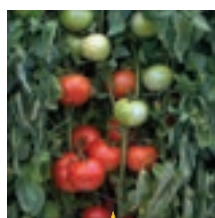


RUBEE GODDESS NEW

TOMATO		HOME GARDEN / BEDDING Hybrid							
		Days	Use	Weight ounces	Shoulders	Shape	Habit	Disease	Features
44002	Better Boy	75	HG	8	GS	C	INDT	ASC, FR ¹ , GLS, N, VW	Widely adapted.
44080	Better Boy Plus 🏠	77	FM/HG	8	GS	C	INDT	ASC, FCR, FR ¹ , GLS, N, SW, ToMV ² , VW	Better Boy Plus has all the great characteristics of the classic Better Boy, plus more flavor, disease resistance and adaptability.
44076	Big Beef 🏠	73	HG	9 - 10	GS	D	INDT	ASC, FR ^{1,2} , N, TMV, VW	AAS winner with an excellent name that will assure its place in the home garden. High yield, attractive.
44081	Big Beef Plus 🏠	75	FM/HG	9 - 10	GS	D	INDT	ASC, FCR, FR ^{1,2} , GLS, N, SW ⁰ , ToMV ^{0,2} , ToTV, VW ¹	Big Beef Plus boasts better flavor, adaptability, disease resistance and appearance! It has the Crimson Gene that gives this classic tomato a visibly deeper red internal gel.
44003	Big Boy Burpee's	78	HG	12	GS	C	INDT		Large, popular home garden.
44006	Celebrity	72	FM, HG	8	GS	D	DT	ASC, FR ^{1,2} , GLS, N, TMV, VW	AAS winner. Excellent flavor.
★ 44082	Celebrity Plus 🏠	75	FM, HG	8	GS	D	DT	ASC, FR:0-1, GLS, N, SW:0, T- MV ^{0,2} , VW:0	A widely adaptable hybrid for fresh market and home garden with added resistance to tomato spotted wilt virus. Large, smooth fruit with outstanding flavor.
44035	Early Girl 🏠	60	HG	4 - 6	GS	B	INDT	VW	Popular, early home garden variety.
NEW 44098	Early Girl Plus	60	HG	4 - 6	GS	B	INDT	SW	One of the best-selling early varieties on the market just got better. Same great taste, with a great disease package. Enjoy more fruit per yield.
44009	Lemon Boy	72	HG	6	GS	C	INDT	ASC, FR ¹ , GLS, N, VW	Lemon colored, sweet flavored.
44083	Lemon Boy Plus 🏠	70	FM/HG	7	GS	C	INDT	ASC, FCR, FR ^{1,3} , GLS, N, ToMV ^{0,2} , ToTV, VW ¹	Lemon Boy Plus has all the best qualities of the original Lemon Boy, plus added flavor and disease resistance. It has a unique yellow color and a sweet, tangy flavor.
NEW 44095	Pink Delicious 🏠	84	HG	8		E	INDT	ToMV ^{0,2} , GLS, VW ¹	With an average of about half a pound per fruit, this crack-resistant titan of a tomato will be sure to please any heirloom lover.
44085	RuBee Dawn 🏠	55	FM/HG	7	GS	C	INDT	ASC, FCR, Ff, FR:0-1, GLS, N, ToMV ^{0,1} , VW ¹	RuBee Dawn is a large-fruited indeterminate red salad variety, that is very early maturing and has great flavor. The fruit are deep oblate in shape, smooth, firm, have a light green shoulder and have a deep red color.
NEW 44124	RuBee Goddess 🏠	60- 65	FM/HG	7	GS	C	INDT	ASC, FCR, FR ^{1,2} , Ff A-E, ToMV ^{0,1} , VW ¹	Rubee Goddess is a large-fruited indeterminate red salad variety, that is early maturing and has high-quality fruit on a productive plant with strong disease resistance.

TOMATO HOME GARDEN/BEDDING Hybrid						
	Priced per package	100 Seeds	500 Seeds	M=1,000 seeds		
	Price per 1,000 seeds (M)			1M	5M	25M 100M
44002 Better Boy	7.10	27.25	43.55	37.85	34.40	32.75
44080 Better Boy Plus	9.45	36.20	57.85	50.30	45.70	43.50
44076 Big Beef	9.05	34.80	55.65	48.35	43.95	41.85
44081 Big Beef Plus	12.05	46.20	73.90	64.25	58.40	55.60
44003 Big Boy Burpee's	6.15	23.60	37.70	32.75	29.75	28.30
44006 Celebrity	8.80	33.75	54.00	46.95	42.65	40.60
44082 Celebrity Plus	11.70	44.85	71.75	62.35	56.65	53.95

TOMATO HOME GARDEN/BEDDING Hybrid						
	Priced per package	100 Seeds	500 Seeds	M=1,000 seeds		
	Price per 1,000 seeds (M)			1M	5M	25M 100M
44035 Early Girl	6.60	25.25	40.35	35.05	31.85	30.30
44098 Early Girl Plus	9.65	37.05	59.25	51.50	46.80	44.55
44009 Lemon Boy	9.30	35.60	56.90	49.45	44.95	42.80
44083 Lemon Boy Plus	12.65	48.60	77.70	67.55	61.40	58.45
44095 Pink Delicious	13.40	51.35	82.15	71.40	64.90	61.80
44085 RuBee Dawn	25.40	97.60	162.65	147.85	140.80	134.05
44124 RuBee Goddess	25.40	97.60	162.65	147.85	140.80	134.05



BHN-964 ★



CAROLINA GOLD ★



FLORIDA 7514



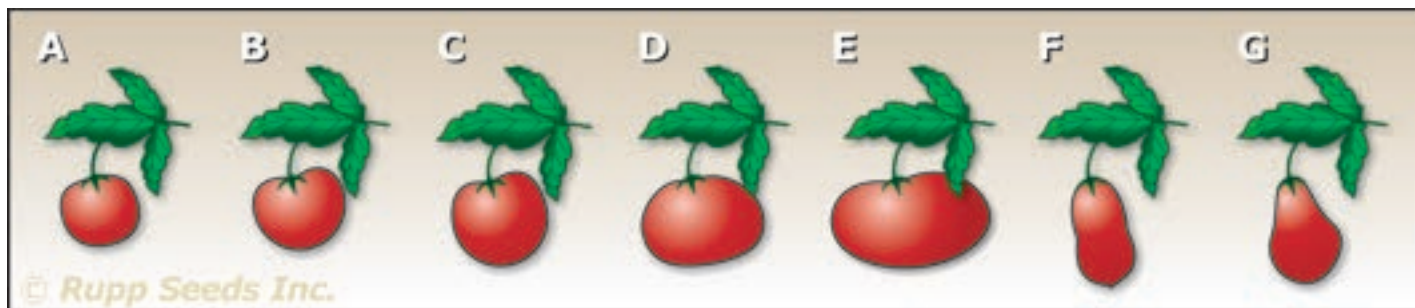
GRAND MARSHALL



LAGUNA RED



MOUNTAIN MAN



TOMATO		FRESH MARKET Hybrid							
▲		Days	Use	Weight ounces	Shoulders	Shape	Habit	Disease	Features
★	44214 BHN-964	76	FM, S	10	UG	C	DT	FR, TMV, VW	A variety with early blight tolerance. Possesses beautiful shoulders and excellent interior flesh quality. Sets well in the heat.
★	44126 Carolina Gold 🌱	75	HG, FM	10 - 12	GS	C	DT	FR ^{1,2} , VW	A yellow hybrid from Syngenta and North Carolina State University with very small blossom scar, tolerance to cracking and weather check.
	44120 Florida 47 R	75	S	10	UG	C	DT	ASC, FR ^{1,2} , GLS, VW	A Seminis hybrid with exceptional firmness and fruit quality.
	44159 Florida 7514 🌱	75	FM, S	10	UG	C	DT	BS, BW, FR ^{1,2} , GLS, VW	A University of Florida hybrid with excellent disease resistance, fruit qualities, yield, plus good crack resistance and great flavor.
	44045 Grand Marshall	78	FM, S	9 - 10	UG	C	DT	ASC, FR ^{1,2} , GLS, TYLC, VW	Vigorous hot set variety with extra-large and large, firm fruit. Pruning is beneficial at a low to medium level. Strong plant and good field performance under bacterial pressure.
Fresh Markets continued on the next page-->									

GROWER PREFERRED ALL-STARS ★ TOMATOES

LARGE ROUNDS

BHN-964 is a great tomato for the grower who wants the perfect combination of excellent flavor and high yield potential.

Carolina Gold is the choice for tomato growers looking for a large yellow hybrid. Carolina Gold produces large fruit with a small stem scar and a very nice yellow/gold color.

Celebrity Plus is a new version of the longtime favorite Celebrity. Growers and customers will love the same great vine ripe flavor and quality fruit but now with the added benefit of TSWV resistance.

Mountain Spring has been a favorite of tomato growers for a long time. Fruit size is consistently large and the maturity is mid-season. Mountain Spring can be used in both open field and high tunnel applications.

Red Snapper was a new tomato offering from Sakata in 2021. Red Snapper can be used as a vine ripe or a mature green. Fruit quality is excellent with the crimson interior and firmness. Maturity is in the 2nd early segment and benefits from light pruning.

Roadster is the variety for the grower needing a high quality round tomato. It has great flavor, fantastic crimson interior, and 2nd early maturity.

ROMA

Mariana is a great choice for your Roma tomato needs. Mariana produces a large number of medium sized fruit on a medium sized plant. Mariana has been a favorite with growers for years.

Dave Silveus
Vegetable Consultant





MOUNTAIN SPRING ★



RAMBLER NEW



RED SNAPPER ★



ROADSTER ★



SKYWAY 687

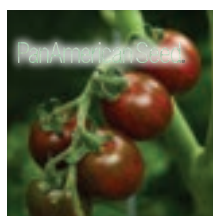


STM2255 ↗

TOMATO		FRESH MARKET Hybrid							
		Days	Use	Weight ounces	Shoulders	Shape	Habit	Disease	Features
44061	Laguna Red 🏠	70	FM, S	8 - 12	UG	C	DT	ASC, FR ^{1,2} FCR, ToMV ^{0,1} VW ¹	A high quality determinate variety well suited for cool season production. Fruit are an attractive red, firm and smooth-shouldered with good flavor. Suited for both mature green and vine ripe markets.
44071	Mountain Man	70	FM	10-12	UG	C	DT	SW	Mountain Man is a fresh market tomato ideal for the eastern summer production season. The strong plant type produces extra-large fruit with delicious flavor.
★ 44067	Mountain Spring 🏠	70	FM, S	10	UG	C	DT	FR ^{1,2} , VW	A superior market hybrid.
NEW 44123	Rambler 🏠	68-72	FM, S	8 - 12	UG	C	DT	ASC, FR ^{1,3} FCR, GLS, SW, VW ¹	Rambler is an adaptable, high quality determinate salad variety featuring high yield potential of jumbo and extra-large fruit. Fruit size, color, quality, and firmness are excellent. Suited for both mature green and vine ripe markets. The plants benefit from light to no pruning.
★ 44063	Red Snapper	70	FM, S	8 - 12	UG	C	DT	ASC, FR ^{1,2} FCR, ToMV ^{0,1} VW ¹	A high quality determinate variety suited for cool season production. Fruit are an attractive red, firm and smooth-shouldered with good flavor. Suited for both mature green and vine ripe markets.
★ 44048	Roadster 🏠	67	FM, S	8 - 12	UG	C	DT	ASC, FR ^{1,2,3} , TSWV, VW	High quality variety. Fruit are attractive red, very firm and smooth-shouldered. Medium tall plants and benefit from light pruning.
44057	Saybrook	80	FM, S	10	UG	C	DT	GLS, N, SW, VW	Saybrook is a determinate round tomato that is ideal for both the vine ripe and mature green market. The vigorous plant type produces a large set of extra-large smooth fruit all the way to the top of plant with good canopy cover to help reduce the risk of sunscald.
44022	Skyway 687 🏠	75	FM	11	UG	C	DT	FR ^{1,3} , N, SW, TYLC	With excellent interior color, firmness and good eating quality, it has a strong plant that provides consistent sized fruit up the plant. Fruit size is extra-large to jumbo.
↗ 44086	STM2255 🏠	70	FM, S	8 - 12	UG	C	DT	ASC, FCR, FR ^{1,2} , GLS, SW, TYLC, VW ¹	STM2255 is a very versatile and adaptable variety with high yield potential and good vine-ripe flavor. Fruit are an attractive red color, firm and have a good shelf-life. Can be used for both mature green and vine ripe markets. Plants benefit from pruning.

TOMATO FRESH MARKET Hybrid				M=1,000 seeds			
Priced per package		100 Seeds	500 Seeds				
Price per 1,000 seeds (M)				1M	5M	25M	100M
44214P	BHN-964 Pelleted	17.35	66.55	110.85	100.75	95.95	91.35
44126P	Carolina Gold Pelleted	13.25	50.80	84.65	76.95	73.25	69.75
44120P	Florida 47 R Pelleted	16.20	62.25	103.75	94.30	89.80	85.50
44159	Florida 7514	9.10	34.85	58.05	52.75	50.20	47.80
44045	Grand Marshall	18.20	70.00	116.60	106.00	100.95	96.10
44061P	Laguna Red Pelleted	18.35	70.50	117.45	106.75	101.65	96.80
44071	Mountain Man	12.85	49.40	82.30	74.80	71.20	67.80
44067	Mt. Spring	10.10	38.70	64.50	58.60	55.80	53.10

TOMATO FRESH MARKET Hybrid				M=1,000 seeds			
Priced per package		100 Seeds	500 Seeds				
Price per 1,000 seeds (M)				1M	5M	25M	100M
44067P	Mt. Spring Pelleted	10.60	40.65	67.75	61.55	58.60	55.80
44123P	Rambler Pelleted	20.55	78.90	131.45	119.50	113.80	108.35
44063P	Red Snapper Pelleted	20.55	78.90	131.45	119.50	113.80	108.35
44048P	Roadster Pelleted	18.40	70.60	117.65	106.95	101.85	97.00
44057P	Saybrook Pelleted	17.30	66.45	110.70	100.60	95.80	91.20
44022P	Skyway 687 Pelleted	17.25	66.30	110.50	100.45	95.65	91.05
44086	STM2255	28.30	108.70	181.10	164.60	156.75	149.25



CHOCOLATE
SPRINKLES



GOLD SPARK



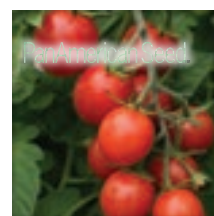
RUBY CRUSH



SWEET GOLD **NEW**



SWEET HEARTS



TIDY TREATS

TOMATO		CHERRY Hybrid					
		Days	Weight ounces	Shape	Habit	Disease	Features
44140	BHN-268	68	0.9	Globe	DT	FR ² , VW	Longer shelf life, increased firmness, and a fraction smaller than other hybrids. Ships extremely well. Fewer picks of higher color fruit. Yields are unbelievable.
44059	Chocolate Sprinkles 🌱	55	.4 - .5	Globe	INDT	FR ¹ , N	Heirloom flavor and appearance with a modern disease package and firm texture. Performs well in high tunnel and open field. Unique dark red fruit with a green striped exterior and purple flesh color.
44087	Gold Spark 🌱	65	.4 - .5	Grape	INDT	Ff, ToMV ⁰² , GLS	Gold Spark a great tasting indeterminate yellow grape with high yield and consistent brix throughout the season. Excellent shelf life. Plants display strong vigor with medium height.
44103	Husky Cherry Red	65	1	Cherry	Dwarf Indt	FR ¹ VW	High yields with controlled growth.
44165	Red Grape	68	.3 - .5	Grape	INDT		A superior flavored grape tomato from D. Palmer Seed with firm, excellent shaped red fruit.
44047	Ruby Crush 🌱	65	.4 - .5	Grape	DT	FCR, FR ^{1,2} , ToMV ⁰² , GLS	Deep red fruit that are very smooth, uniform and firm with a good flavor profile. Limited to no pruning necessary. High yield potential.
NEW 44125	Sweet Gold	65	.3 - .5	Cherry	INDT	FR ¹ , ToMV ⁰¹	A very early, indeterminate yellow cherry tomato with good flavor. Plants are high yielding and very vigorous — producing single and double clusters. Fruit are small and weigh around 10 to 15 grams.
44199	Sweet Hearts 🌱	60	.4 - .5	Grape	INDT	Ff, Fol, ToMV ⁰²	Hybrid from Sakata with excellent crack resistance, shelf life, high Brix and yields. Sets under cooler conditions than most grapes.
44049	Tidy Treats 🌱	50-55	.2 - .4	Cherry	DT	FR, VW	Tons of fruit on a compact plant. Good in small-space gardens and containers.
Open Pollinated							
44068	Artisan Bumble Bee Mix	70	.7 - .8		INDT		A mix of 3 colors of Bumble Bee Cherry Tomatoes. Pink, Purple and Sunrise, which is yellow with red stripes. Excellent sweet and tangy flavor, 0.7-0.8 oz fruit.

TOMATO CHERRY Hybrid		M=1,000 seeds				
Priced per package		100 Seeds	500 Seeds			
Price per 1,000 seeds (M)				1M	5M	25M
44140P	BHN-268 <small>Pelleted</small>	45.40	150.75	251.25	239.25	227.85
44059	Chocolate Sprinkles	24.25	80.40	133.95	127.80	121.70
44087	Gold Spark	64.50	214.15	356.85	339.85	323.65
44103	Husky Cherry Red	6.65	24.45	39.05	33.95	30.85
44165	Red Grape	28.70	95.25	158.70	151.40	144.15
44047	Ruby Crush	41.35	137.30	228.80	218.30	207.90
44125	Sweet Gold	6.50	23.95	38.30	33.30	30.25
44199	Sweet Hearts	57.95	192.45	320.70	305.40	290.85
44222	Sweet Treats	54.85	182.10	303.45	289.00	275.20
44049	Tidy Treats	13.05	43.35	72.20	68.85	65.55
* Multiple packages may be used to fill orders for these quantities.						

TOMATO CHERRY Open Pollinated		M=1,000 seeds			
Priced per package	100 Seeds	500 Seeds			
Price per 1,000 seeds (M)			1M	5M	
44068 Artisan Bumble Bee Mix	9.05	33.35	53.35	46.35	



ARTISAN BUMBLE
BEE MIX

ORDERS
OVER \$350
ARE SHIPPED
FREE!



MARIANA ★



MONTICELLO



SAN MARZANO

TOMATO		GREENHOUSE			
▲	Use	Weight ounces	Shape	Disease	Features
44198 Arnold Rootstock	Cold Greenhouse & Tunnels				Used as a rootstock to be grafted with a selected tomato variety as the scion. Do not use for production alone. Arnold has a more generative effect on the plant and is therefore suitable for vigorous varieties, late plantings in the spring or in vegetative conditions; such as with growers that produce without heat to save energy.

TOMATO		PROCESSING / SALADETTE Hybrid						
▲		Days	Use	Weight ounces	Shape	Habit	Disease	Features
44062	BHN-1045	75	FM, S	4	F	DT	FR ^{1,2,3} N, SW, TYLC, VW	The newest BHN Roma release. BHN1045 has uniform large fruit and a deep blocky shape. A strong determinate plant with an excellent disease package. An all-around improved BHN410.
★	44176 Mariana	74	FM	4 - 5	F	DT	ASC, FR ^{1,2} , N, VW	A blocky, Roma type with thick walls and very good external and internal fruit color. Excellent firmness and shelf life.
	44224 Monticello	74	FM	4 - 5	F	DT	ASC, FR ^{1,2} , N, VW	High disease package. Suitable for the northern and central growing regions of the Eastern U.S.
	44091 San Marzano	61	FM	3.8	F	INDT		A step above your typical Roma with high yields. Classic Italian flavor with an extra kick! Great in sauces and baked dishes.

TURNIPS / RUTABAGA		Days	Features
45903 Laurentian <small>Rutabaga</small>		90	A dependable, yellow-fleshed rutabaga for storage and shipping. Selected for its sweet flavor and small necks.
45501 Purple Top White Globe		57	Smooth, globe-shaped, purple topped with white globe beneath 5 - 6" fruit with white, fine grained flesh.
45001 Tokyo Cross ^{F1}		35	A very early, perfect globe shaped root. Can be harvested from 2 - 6" without risk of getting pithy.

TOMATO GREENHOUSE		M=1,000 seeds		
Priced per package		100 Seeds	500 Seeds	
Price per 1,000 seeds (M)				1M
44198 Arnold Rootstock		49.35	189.75	316.25

* Multiple packages may be used to fill orders for these quantities.

TURNIPS / RUTABAGA						
Priced per package		1 oz.	4 oz.			
Priced per pound in these package sizes				1#	5#	50#
45903	Laurentian <small>Rutabaga</small>	3.90	13.45	37.60	36.60	
45501U	Purple Top White Globe <small>Untreated</small>		6.85	16.75	16.25	15.75
45001	Tokyo Cross	22.85	79.45	222.20	221.20	

TOMATO PROCESSING/SALADETTE Hybrid		100 Seeds	500 Seeds				
Priced per package				1M	5M	25M	100M
Price per 1,000 seeds (M)							
44062P BHN-1045 <small>Pelleted</small>		17.35	66.55	110.85	100.75	95.95	91.35
44176P Mariana <small>Primed Pelleted</small>		13.30	51.15	85.20	77.45	73.75	70.20
44224P Monticello <small>Pelleted</small>		12.25	47.05	78.40	71.25	67.85	64.60
44091 San Marzano		14.75	56.60	94.30	85.70	81.60	77.70

* Multiple packages may be used to fill orders for these quantities.



ESTRELLA ★ pg. 117

WATERMELON

PLANTING

Start in the greenhouse and allow 28 - 35 days to get plants ready to transplant. Excessive water during germination must be avoided. Water transplant growing medium well and allow excess moisture to drain and moisture to stabilize for 24 - 48 hours. Bring medium temperature to 80 - 95°F before seeding. Seedcoat adherence to cotyledons may be virtually eliminated by orienting the seed in transplant trays with the pointed end up at a 45° to 90° angle. Plant transplants 6 - 12 feet apart with 36" between plants.

See "Germination Chart" on page 125 for additional information on germination rate and days to germination at various soil temperatures.

MANAGEMENT

Scout fields every 7 days to monitor weed, insect, and disease pressure. Place pollinating insects near the field to ensure proper pollination. Water only if necessary. Do not over-water.

HARVEST

Ripeness is indicated by a cream to slight yellowing of the white background color of the part of the melon that rests on the ground. Drying of the stem tendril nearest the attachment point of the watermelon and green color tone of the rind are also indicators of ripeness but these vary with cultivar. Melons should be cut from the vine rather than pulled, twisted, or broken off.

STORAGE

Store at 50 - 60°F and at a humidity level of 90 - 95%. This will ensure a long shelf life.

DISEASE CODES

A - Anthracnose
F - Fusarium
GSB - Gummy Stem Blight



ESTRELLA ★



SANGRIA

Naturall™

Enhance root growth and increase seedling vigor for healthier plants and higher yields with Naturall™ for Vegetables.



See page 123 for rates and pricing.



JADE STAR



YELLOW DOLL

WATERMELON		LARGE Hybrid							
		Days	Shape	Weight pounds	Rind Type	Flesh Color	Seed Size	Disease	Features
★ 46041	Estrella 	80	Long Blocky	20 - 24	Allsweet	Bright Red	Small	A, F	Excellent flavor and texture. Plants are typically vigorous with large leaves. Uniform fruit.
46030	Sangria 	85	Elongated	18 - 22	Allsweet	Bright Red	Large	A, F	Good field performance with excellent taste.

WATERMELON		ICEBOX							
		Days	Shape	Weight pounds	Rind Type	Flesh Color	Seed Size	Disease	Features
46051	Jade Star 	80	Round Oval	15	Dark Green / Faint Stripes	Intense Red	Small	F ¹	An improved Sugar Baby type hybrid with brighter, sweeter flesh and a better vine. For fresh market.
46005	Yellow Doll 	68	Oval	5 - 7	Medium Green / Dark Stripes	Yellow	Small		Unusual, very sweet home garden hybrid. Crisp flesh.

WATERMELON LARGE Hybrid		M=1,000 seeds			
Priced per package		250 Seeds			
Price per 1,000 seeds (M)		1M	5M	10M*	
46041	Estrella	42.95	110.80	105.80	100.80
46030	Sangria	45.20	116.60	111.60	106.60

*NOTICE WATERMELON GROWERS: Customers are required to sign a "Waiver of Liability" form, prior to the shipping of any watermelon seed.

* Multiple packages may be used to fill orders for these quantities.

WATERMELON ICEBOX		M=1,000 seeds			
Priced per package		250 Seeds			
Price per 1,000 seeds (M)		1M	5M	10M*	
46051	Jade Star	40.65	104.15	103.15	102.15
46005	Yellow Doll	42.90	109.90	108.90	107.90

* Multiple packages may be used to fill orders for these quantities.



DOCUMENTS REQUIRED

Various products in our catalog require signed documents before seed can be shipped. Look for this document icon with a page number. This will guide you to the page with the appropriate document for the product you are purchasing.

*REQUIRED for all watermelon prior to shipping.



SWEET DAWN ★ pg. 120

WATERMELON SEEDLESS

PLANTING

Start in the greenhouse. Allow 28 - 35 days to get plants ready to transplant. Excessive water during germination must be avoided. Water transplant growing medium well and allow excess moisture to drain and moisture to stabilize for 24 - 48 hours. Bring medium temperature to 80 - 95°F before seeding. Seedcoat adherence to cotyledons may be virtually eliminated by orienting the seed in transplant trays with the pointed end up at a 45° to 90° angle. Plant transplants 6 - 12 feet apart with 36" between plants.

As a general rule, direct field seeding of the pollinizer variety should be done on the same day the triploid seed is planted in the greenhouse. Small-fruited, icebox varieties usually flower earlier than standard watermelon varieties. If icebox varieties are to be used as the pollinizer, then direct seeding should be delayed a week to ten days. The diploid icebox pollinizer variety will frequently set fruit and stop producing male blossoms while the triploid variety is still producing female blossoms. Growers may make a second planting of a pollinizer 2 - 3 weeks after the initial planting to provide pollen for the late-developing female

blossoms on the triploid variety. No consistent differences among any standard and icebox types in effectiveness of pollination have been noted. Icebox varieties used as pollinizers result in high early yields; standard varieties used as pollinizers result in high total yields.

See "Germination Chart" on page 125 for additional information on germination rate and days to germination at various soil temperatures.

MANAGEMENT

For successful seedless watermelon production, an adequate bee population is especially important to transfer the pollen from the pollinizer variety to the seedless variety (seedless watermelons do not produce pollen). The pollinizer variety is normally planted in alternate, or every third row to ensure adequate pollen movement by the bees. At least eight visits to an individual flower of the seedless variety are necessary for adequate hormonal stimulation for normal fruit development. Scout fields very 7 days to monitor weed, insect, and disease pressure.

HARVEST

Ripeness is indicated by a cream to slight yellowing of the white background color of the part of the melon that rests on the ground. Drying of the stem tendril nearest the attachment point of the watermelon and green color tone of the rind are also indicators of ripeness but these vary with cultivar. Melons should be cut from the vine rather than pulled, twisted, or broken off.

STORAGE

Store at 50 - 60°F and at a humidity level of 90 - 95%. This will ensure a long shelf life.



AMARILLO



BOLD RULER



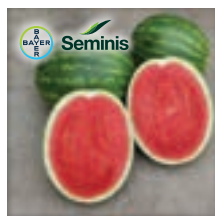
DARK KNIGHT



EL CAPITAN



FASCINATION★



JOY RIDE



SAVE WITH CASH DISCOUNTS

Cash discounts are available throughout the season and are a great way to add money to your bottom line.
See page 130 for all of the details.

November	.....7%
December	.....6%
January	.....5%
February	.....4%
March	.....3%
April	.....2%



MELODY



ORANGE CRISP

WATERMELON		TRIPLOID Hybrid					Pricing on page 120
		Days	Shape	Weight pounds	Rind Type	Flesh Color	Features
46093	Amarillo	82	Globe	13 - 15	Tiger Stripe	Yellow	A Syngenta melon with deep yellow flesh and less tendency to hollow heart.
46001	Bold Ruler	83	Round / Oval	16 - 18	Crimson Sweet	Bright Red	A high quality seedless with early set in cool conditions. Very high yield and excellent fruit uniformity. Must be planted with an early pollinator like Ace Plus.
46049	Dark Knight	80	Globe	14 - 17	Dark Green	Dark Red	Dark Knight is eye-catching with its globe shape and dark green smooth exterior. Dark red flesh with medium firmness. Slightly larger fruit size than Sweet Gem.
46052	El Capitan	85-90	Blocky Oval	16 - 20	Wide dark green stripes	Deep Red	A newer triploid watermelon with an attractive darker Crimson Sweet rind pattern. This variety has shown excellent yield potential as well as extended shipping and field holding ability. Uniform, blocky-shaped fruit on vigorous vines. Deep red, firm flesh, small pip size and excellent flavor.
★ 46140	Fascination	85	Blocky	17 - 21	Crimson Sweet	Dark Red	A variety with very firm, high quality flesh with small pips. Exhibits improved disease tolerances to Fusarium and Anthracnose.
46026	Joy Ride	86	Oblong	19 - 20	Mottle Stripe	Dark Red	Highly adaptable and suitable hybrid for growing across all regions of the country. Produces a large percentage of 36-count watermelons. Offers a thick rind and firm fruit with uniform setting. Has a vigorous plant type with good canopy coverage. Has shown a high, industry leading average degrees Brix of 11.5 in trials, surpassing all comparable varieties.
46134	Melody	80	Globe	14 - 16	Allsweet	Dark Red	Offers growers the advantage of an early maturing hybrid, with a heavy, concentrated and uniform fruit set.
46007	Orange Crisp	92	Round / Oval	14 - 18	Jubilee	Orange	The melons hold up for a very long time in and out of the field. Very crisp and firm flesh. Yellow-orange flesh turns more orange as it matures and the taste improves with time. Don't pick too early!

Additional Triploid Watermelons can be found on the next page --->.

ORDERS
OVER \$350
ARE SHIPPED
FREE!



SWEET DAWN★









SWEET GEM★



YELLOW
BUTTERCUP



SIRIUS

WATERMELON		TRIPLOID Hybrid					Pricing on page 120
		Days	Shape	Weight pounds	Rind Type	Flesh Color	Features
★ 46102	Sweet Dawn 	76	Blocky	16 - 20	Crimson Sweet	Dark Red	Early variety that produces consistently high yields, offering growers significant first to market advantages. Firm and sweet flesh are ideal for retail markets.
★ 46008	Sweet Gem 	83	Oval	12	Dark Green	Bright Red	High-yielding seedless variety that produces uniform, large, oval fruit with a rich, classy rind. Its distinctive look and superior flavor make it ideal for the fresh market and a standout in the produce aisle.
46021	Yellow Buttercup 	90	Round/ Oval	14 - 16	Dark Green Background / Green Stripes	Bright Yellow	One of the top yellow-fleshed varieties in today's marketplace. Crisp texture and great eating quality.
Personal Size							
46045	Sirius 	74	Globe	5.5-6.5	Crimson Sweet	Red	High-quality, Crimson Sweet striped personal size seedless. Medium thick rind and intermediate resistance to Fusarium wilt race 1. Globe shaped fruit with red flesh and small-medium pip size. Early maturity.
Pollenizers							
46103	Ace Plus 		Round / Oval		Light Green Background / Medium Green Stripes		Offers a very early flowering date that makes pollen available for the first female flowers produced by the triploid hybrid. Continues an elongated pollination cycle.
46109	Wild Card Plus 		Round / Oval		Light Green Background / Medium Green Stripes		Early and extended flowering period that ensures early pollination availability when triploid hybrid begins flowering. Long, thin internodes radially extend pollen to wherever a female flower is located.

WATERMELON TRIPLOID Hybrid		M=1,000 seeds				
		100 Seeds	500 Seeds			
	Priced per package Price per 1,000 seeds (M)			1M	5M	10M*
46093	Amarillo <small>Yellow</small>	70.60	282.35	482.60	475.10	470.10
46001	Bold Ruler	34.00	136.00	232.40	224.90	219.90
46049	Dark Knight	77.20	308.65	527.60	520.10	515.10
46052	El Capitan	46.10	184.40	315.15	307.65	302.65
46140	Fascination	60.30	241.20	412.30	404.80	399.80
46026	Joy Ride	46.75	186.85	319.35	311.85	306.85
46134	Melody	58.30	233.05	398.35	390.85	385.85
46007	Orange Crisp	49.95	199.70	341.30	333.80	328.80
46102	Sweet Dawn	61.45	245.65	419.90	412.40	407.40
46008	Sweet Gem	74.50	297.85	509.10	501.60	496.60
46021	Yellow Buttercup	60.15	240.50	411.10	403.60	398.60

DOCUMENTS REQUIRED

Various products in our catalog require signed documents before seed can be shipped. Look for this document icon with a page number. This will guide you to the page with the appropriate document for the product you are purchasing.

*REQUIRED for all watermelon prior to shipping.



ACE PLUS



WILD CARD PLUS

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Naturall

Enhance root growth and increase seedling vigor for healthier plants and higher yields with Naturall™ for Vegetables.

See page 123 for rates and pricing.

GROWER PREFERRED ALL-STARS ★ WATERMELON

LARGE SEEDED

Estrella is early (80 days) with excellent flavor and texture, nice consistently blocky fruit that has a great look at the market.

TRIPLOID

Fascination is the #1 planted variety in the Eastern US for good reasons: high quality interior and a rich non-fading rind color combined with yield and tolerance to Fusarium and Anthracnose. It provides the flavor that your customers demand. Fascination should be part of any size operation.



Sweet Dawn provides great eating quality in an early season seedless. More consistent size and shape as compared to Melody. Will get you to the marketplace a week earlier than Fascination. This is the melon that I go out and pick when we need one for our own table.

Sweet Gem is a great eating seedless with a "Black Diamond" look and superior flavor that will set your crop apart in the marketplace.

Brad Paulson
Vegetable Consultant

WATERMELON TRIPLOID Hybrid

M=1,000 seeds

	100 Seeds	500 Seeds			
Priced per package					
Price per 1,000 seeds (M)			1M	5M	10M*
Personal Size					
46045 Sirius	47.35	189.25	323.50	316.00	311.00
Pollenizers					
46103 Ace Plus ^{F300}	32.30	129.10	220.65	213.15	208.15
46109 Wild Card Plus ^{F300}	35.20	140.80	240.60	233.10	228.10

* Multiple packages may be used to fill orders for these quantities.



RUPP KNIT HAT



RUPP HOODIE



RUPP CAMO CAP



RUPP KHAKI &
BLACK CAP



RUPP RED & GRAY
CAP



RUPP CLOTHING

		Regular Sizes	Tall Sizes	Features
PHAT.KNIT.1	Rupp Knit Hat	One size fits all		A soft knit hat that features the Rupp logo on the front. It is ready to keep you warm.
PJKT.SWT.HD	Rupp Hoodie Sweatshirt	S - 3XL		Charcoal gray pull-over hoodie sweatshirt with the a large Rupp logo on the front.
PHAT.SOLID.G3	Rupp Camouflage Solid Cap	One size fits all		This ballcap features a sloped front and a pre-formed visor. The cap is black with Realtree Hardwoods® camouflage and barbed wire accent. Rupp Seeds logo embroidered in gray.
PHAT.MESH.G5	Rupp Khaki & Black Mesh Cap	One size fits all		This mesh back cap features a Rupp logo patch on the front and has our "See What Good Yields™" tagline on the back.
PHAT.SOLID.G7	Rupp Red & Gray Solid Cap	One size fits all		This ballcap features a sloped front and a pre-formed visor. The cap is red and gray with Rupp Seeds logo embroidered in white on the front and our "See What Good Yields™" tagline on the back.

Please allow 3-4 weeks for delivery on clothing.

RUPP CLOTHING

RECOMMENDED SIZE CHART

	XS	S	M	L	XL	2XL	3XL	4XL	5XL	6XL
Men's Size	30-32	34-36	38-40	42-44	46-48	50-52	54-56	58-60	62-64	66-68
Ladies Size	2-4	6-8	10-12	14-16	18-20	22-24	26-28	30-32		
Size Code**	X	S	M	L	1	2	3	4	5	6

** Use item number plus size code. Add a 'T' to the end for tall sizes.

CLOTHING

	Size Size codes	XS	S	M	L	XL	2XL	3XL	4XL	5XL	6XL
PJKT.SWT.HD	Rupp Hoodie Sweatshirt										
PHAT.KNIT.1	Rupp Knit Hat										
PHAT.SOLID.G3	Rupp Camouflage Cap										
PHAT.SOLID.G7	Rupp Red & Gray Cap										
PHAT.MESH.G5	Rupp Khaki & Black Mesh cap										

Prices include shipping. Allow 3-4 weeks for delivery.

Cash discounts are not available on clothing.



1 OZ. PACKET



4 OZ. PACKET



BIN MARKERS

POINT OF SALE

Seed Packets	Priced per box of 500 packets	Box
VPOS.PACKET.1Z 1 oz seed packets - 3 1/4" x 4 3/4"		42.00
VPOS.PACKET.4Z 4 oz seed packets - 4 5/8" x 6 7/8"		63.00
Bin Markers		
VPOS.BINMARK 4 3/4" x 6 3/4" Bin Marker - Pack of 25		2.65

PLANTER PLATES

	Priced per plate	1 plate
B John Deere Plates		78.75
C IH Plates		78.75
F Filler Ring		78.75

Give us a call about your planter plate needs. We have a good stock including blank plates available for you to make your own cells for those hard to fit seeds.

Biological Enhancement for Vegetables

Naturall™

for Vegetables

ROOT INOCULANT

Naturall™ for Vegetables contains proprietary and patent pending biologicals that colonize the root system of plants. Crop stress such as disease and dry weather can be alleviated, and often systemically, so that root colonization by this treatment can affect the physiology of the whole plant resulting in higher yields.



Enhanced root growth
Healthier plants
Increased seedling vigor
Easy to apply
Higher yields
Improved nutrient and water efficiency

ABM | abm1st.com

CONTENTS SETTLE SHAKE CONTAINER WELL BEFORE MEASURING

SabrEx™

ROOT INOCULANT

for CORN

Application rate: SabrEx for corn can be used for field corn, popcorn, sweet corn and sunflowers at a rate of 0.5 oz. per 50 lb. of seed.

Directions for use: Apply as a dry seed treatment prior to planting. Mix until uniform coverage is obtained.

Compatibility: SabrEx is compatible with many common fungicides and insecticides. For current compatibilities, contact your ABM representative or call 877-617-2461.

Product specifications: Contains proprietary and crop-specific combination of patent-pending strains of Trichoderma microorganism spores formulated with an 80/20 talc/graphite carrier.

Minimum specifications: 7x10⁷ cfu/gm.

CONTAINS LIVING ORGANISMS. STORE IN A COOL DRY PLACE OUT OF SUNLIGHT.

Made in the USA

Net Contents: 1 oz.



ADVANCED BIOLOGICAL MARKETING | P.O. Box 222 | Van Wert, OH 45891 | USA | 877.617.2461 | ABM1st.com

NATURALL™ PB APPLICATION RATES

CROPS	RATE
Cucurbit Vegetables: Pumpkins and Squash	1.0 oz. per 80,000 seeds
Cucurbit Vegetables: Cucumbers and Melons	0.5 oz. per 80,000 seeds
Broccoli, Cabbage and Cauliflower	0.5 oz. per 50,000 seeds
Peppers and Tomatoes: Garlic, Leeks, Onions, Shallots	0.5 oz. per 100,000 seeds
Root Crops: Beets, Sugar Beets, Red Beets, Carrots, Celeriac, Chicory, Horseradish, Parsnip, Radish, Rutabaga, Salsify, Turnips	0.5 oz. per 100,000 seeds

INOCULANT

	Priced per pouch	Each
TRT.NATRALPB.1Z Naturall PB for Vegetables 1 oz pouch		32.55
TRT.GRAPHEx Graph-Ex SA Pea and Bean Inoculant 4 oz pouch		14.70
TRT.SABREX SabrEx PB for Sweet Corn 1 oz pouch		36.25

A
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PLANTING GUIDE									
^	Seeding Rate				Seed or Plant Spacing			Recommended Soil Temperature	Days to Germination
	Seeds per Pound	per Acre by Weight	per Acre in 1000s	Seeds per 1000 foot of Row	In Row	Between Rows	Depth		
Asparagus	12,800 - 16,500	7.5 - 11 oz	6.1 - 11.4 M	667 - 1,000	12 - 18"	48 - 60"	.8"	60 - 85°F	10 - 20
Beans Bush Green	1,500 - 1,600	60.5 - 68 lbs	90.8 - 108.9 M	6,000	2"	30 - 36"	.5 - 1"	65 - 85°F	8 - 12
Beet	25,600 - 30,000	5.3 - 6.1 lbs	136.1 - 181.5 M	6,000	2"	18 - 24"	.5 - 1"	60 - 85°F	6 - 10
Broccoli	80,000 - 128,000	2.9 - 3 oz	15.2 - 22.7 M	1,000	12"	24 - 36"	.3 - .5"	60 - 75°F	6 - 10
Brussels Sprouts	80,000 - 128,000	1 - 1.4 oz	7.6 M	500	24"	36"	.5 - 1"	60 - 75°F	6 - 10
Cabbage	107,000 - 128,000	1.9 - 2.2 oz	15.2 M	1,000	12"	36"	.3 - .5"	50 - 60°F	6 - 10
Cantaloupe	15,000 - 20,000	4 - 4.8 oz	3.8 - 6.1 M	500 - 667	18 - 24"	60 - 72"	.5 - 1"	75 - 85°F	7 - 12
Carrots	320,000 - 410,000	2 - 2.1 lbs	653.2 - 871 M	24,000	.5"	15 - 20"	.5"	50 - 85°F	8 - 12
Cauliflower	116,000 - 128,000	1.1 - 1.3 oz	7.6 - 10.1 M	500 - 667	18 - 24"	36"	.3"	50 - 77°F	6 - 10
Celery	960,000 - 1,417,500	0.5 - 0.8 oz	45.4 M	2,000	6"	24"	.1"	65 - 70°F	21 - 25
Collards	90,700 - 144,000	1.3 - 1.8 oz	10.1 - 12.1 M	667 - 800	15 - 18"	36"	.3 - .5"	60 - 75°F	6 - 10
Cucumber	16,000 - 18,000	0.6 - 1 lbs	10.1 - 18.2 M	667 - 1,000	12 - 18"	30 - 36"	.5 - 1"	60 - 95°F	7 - 10
Eggplant	96,000 - 110,000	1 - 1 oz	5.5 - 6.9 M	600 - 750	16 - 20"	60"	.2 - .5"	85 - 90°F	10 - 14
Endive	240,000 - 260,000	1.4 - 2.2 oz	22.7 - 36.3 M	1,000 - 1,200	10 - 12"	18 - 24"	.5"	50 - 75°F	10 - 14
Kale	124,000 - 136,000	1.9 - 2.9 oz	15.2 - 24.2 M	667 - 800	15 - 18"	18 - 24"	.25 - .5"	60 - 75°F	6 - 10
Kohlrabi	123,000 - 144,000	1.9 - 2.7 oz	15.2 - 24.2 M	667 - 800	15 - 18"	18 - 24"	.25 - .5"	60 - 75°F	6 - 10
Leeks	144,000 - 151,000	1.1 - 1.4 lbs	163.3 - 204.2 M	6,000	2"	16 - 20"	.5"	65 - 95°F	10 - 14
Lettuce	364,000 - 432,000	3 - 3.4 oz	68.1 - 90.8 M	3,000	4"	18 - 24"	.3 - .5"	50 - 75°F	2 - 7
Mustard	204,000 - 272,000	4 - 5.3 oz	68.1 M	1,500	8"	12"	.3"	60 - 75°F	5 - 8
Okra	7,800 - 8,000	1.1 - 1.3 lbs	8.7 - 10.1 M	667	18"	36 - 42"	1"	65 - 95°F	7 - 18
Onion	106,000 - 144,000	1.4 - 1.5 lbs	163.3 - 204.2 M	6,000	2"	16 - 20"	.5"	32 - 85°F	10 - 14
Parsley	266,000 - 288,000	8.2 - 13.4 oz	136.1 - 242 M	3,000 - 4,000	3 - 4"	9 - 12"	.3"	50 - 86°F	21 - 25
Parsnips	87,000 - 120,000	1.4 - 1.5 lbs	121 - 181.5 M	4,000	3"	12 - 18"	.3 - .5"	32 - 75°F	18 - 25
Peas	2,200 - 2,400	41.2 - 90.7 lbs	90.8 - 217.8 M	6,000 - 12,000	1 - 2"	30 - 36"	1.5 - 2"	40 - 86°F	6 - 10
Pepper <small>Twin row on plastic</small>	64,000 - 76,000	2.2 - 2.6 oz	9.1 - 12.1 M	500 - 667	18 - 24"	12"	.3 - .5"	65 - 86°F	10 - 14
Pumpkin	3,000 - 3,200	0.6 - 1.2 lbs	1.9 - 3.8 M	333 - 500	24 - 36"	72 - 96"	.5 - 1"	70 - 80°F	7 - 10
Radish	45,000 - 48,000	12.1 - 15.1 lbs	544.4 - 725.8 M	12,000	1"	9 - 12"	.5 - .8"	60 - 85°F	5 - 8
Spinach	39,000 - 48,000	3.7 - 11.3 lbs	145.2 - 544.4 M	4,000 - 12,000	1 - 3"	12 - 15"	.5"	32 - 60°F	7 - 10
Squash Summer	2,500 - 6,000	1.7 - 1.8 lbs	4.6 - 10.1 M	500 - 667	18 - 24"	36 - 60"	.5 - .75"	70 - 80°F	7 - 10
Squash Winter	3,000 - 4,000	1 - 1.3 lbs	2.9 - 5.1 M	500 - 667	18 - 24"	72 - 96"	.5 - .75"	70 - 80°F	7 - 10
Sweet Corn	2,700 - 6,000	4.5 - 6.7 lbs	18.2 - 27.3 M	1,000 - 1,500	8 - 12"	30"	.75 - 1.5"	60 - 75°F	7 - 10
Tomato	140,000 - 165,000	0.8 - 0.8 oz	7.6 M	667	18"	48"	.25 - .5"	60 - 75°F	7 - 10
Turnip	173,000 - 192,000	1.4 - 1.6 lbs	272.2 M	6,000	2"	12"	.3"	60 - 75°F	6 - 10
Watermelon Large	4,000 - 8,000	5.1 - 5.1 oz	1.3 - 2.6 M	333	36"	72 - 144"	.5 - 1"	80 - 95°F	8 - 12
Watermelon Small	8,000 - 10,000	2.6 - 4 oz	1.3 - 2.6 M	333	36"	72 - 144"	.5 - 1"	80 - 95°F	8 - 12

GERMINATION CHART PERCENTAGE OF NORMAL VEGETABLE SEEDLINGS

PRODUCED AT DIFFERENT TEMPERATURES* **

Seeds will germinate at a wide range of temperatures. However, there is an optimal temperature that will maximize production time. This chart shows the percentage of seedlings produced at various temperatures and the number of days until seedling emergence at each temperature: shown in ().

The numbers in red = the optimal daytime soil temperature for maximum production in the shortest time.

Crops	32°F	41°F	50°F	59°F	68°F	77°F	86°F	95°F	104°F
Asparagus	0	0	61% (53 d)	80% (24 d)	88% (15 d)	95% (10 d)	79% (12 d)	37% (19 d)	0
Beans, lima	0	0	1	52% (31 d)	82% (18 d)	90% (7 d)	88% (7 d)	2	0
Beans, snap	0	0	1	97% (16 d)	90% (11 d)	97% (8 d)	47% (6 d)	39% (6 d)	0
Beets	0	53% (42 d)	72% (17 d)	88% (10 d)	90% (6 d)	97% (5 d)	89% (5 d)	35% (5 d)	0
Cabbage	0	27	78% (15 d)	93% (9 d)	97% (6 d)	99% (5 d)	70% (4 d)	0	0
Carrots	0	48% (51 d)	93% (17 d)	95% (10 d)	96% (7 d)	96% (6 d)	95% (6 d)	74% (9 d)	0
Cauliflower	0	0	58% (20 d)	60% (10 d)	62% (6 d)	63% (5 d)	45% (5 d)	0	0
Celery	0	72% (41 d)	70% (16 d)	40% (12 d)	97% (7 d)	65%	0	0	0
Cucumber	0	0	0	95% (13 d)	99% (6 d)	99% (4 d)	99% (3 d)	99% (3 d)	49
Eggplant	0	0	0	0	21% (13 d)	53% (8 d)	60% (5 d)	0	0
Lettuce	98% (49 d)	98% (15 d)	98% (7 d)	99% (4 d)	99% (3 d)	99% (2 d)	12% (3 d)	0	0
Muskmelon	0	0	0	0	38% (8 d)	94% (4 d)	90% (3 d)	0	0
Okra	0	0	0	74% (27 d)	89% (17 d)	92% (13 d)	88% (7 d)	85% (6 d)	35% (7 d)
Onions	90% (136 d)	98% (31 d)	98% (13 d)	98% (7 d)	99% (5 d)	97% (4 d)	91% (4 d)	73% (13 d)	2
Parsley	0	0	63% (29 d)	0% (17 d)	69% (14 d)	64% (13 d)	50% (12 d)	0	0
Parsnips	82% (172 d)	87% (57 d)	79% (27 d)	85% (19 d)	89% (14 d)	77% (15 d)	51% (32 d)	1	0
Peas	0	89% (36 d)	94% (14 d)	93% (9 d)	93% (8 d)	94% (6 d)	86% (6 d)	0	0
Peppers	0	0	1	70% (25 d)	96% (13 d)	98% (8 d)	95% (8 d)	70% (9 d)	0
Radish	0	42% (29 d)	76% (11 d)	97% (6 d)	95% (4 d)	97% (4 d)	95% (3 d)	0	0
Spinach	83% (63 d)	96% (23 d)	91% (12 d)	82% (7 d)	52% (6 d)	28% (5 d)	32% (6 d)	0	0
Sweet Corn	0	0	47% (22 d)	97% (12 d)	97% (7 d)	98% (4 d)	91% (4 d)	88% (3 d)	10
Tomatoes	0	0	82% (43 d)	98% (14 d)	98% (8 d)	97% (6 d)	83% (6 d)	46% (9 d)	0
Turnips	1	14	79% (5 d)	98% (3 d)	99% (2 d)	100% (1 d)	99% (1 d)	99% (1 d)	88% (3 d)
Watermelon	0	0	0	17	94% (12 d)	90% (5 d)	92% (4 d)	96% (3 d)	0

* The above data was taken from a report published in the mid-1980's. Author, affiliation, and publisher are not known.

** The above table was derived from experimental data. Certain logical inconsistencies exist due to crop failure or to bad batches of seed. They do not interfere with the overall interpretation.

A

B

C

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W



United States Department of Agriculture

This is to verify that

Rupp Seeds, Inc.

Pettisville, Ohio

has successfully met USDA's acceptance criteria of the voluntary

USDA Good Agricultural Practices & Good Handling Practices Audit

Wholesale Distribution Center/Terminal Warehouses

Various Fruits and Vegetables

Donna D. Bule-Ford

Chief, Audit Services Branch

Audit ID: 40209

11/10/2021

Audits are valid for one year from date on certificate. To verify continued adherence to the program, please visit www.ams.usda.gov/gapship



Rupp Seeds Inc.
17919 County Road B
Wauseon, Ohio 43567

419-337-1841
fax 419-337-5491
www.ruppseeds.com

Letter of Guarantee

To whom it may concern,

Rupp Seeds Incorporated was founded in 1946 and is a family owned business now in its third generation of family management.

Rupp Seeds is an active member of the American Seed Trade Association (ASTA) (www.betterseed.org), Independent Professional Seed Association (IPSA) (ipseed.org) and Ohio Seed Improvement Association (OSIA) (www.ohseed.org).

Involvement in these organizations insures that we stay abreast of best practices in managing seed and variety quality throughout production and processing in a manner that meets and exceeds industry standards.

Rupp Seeds is an authorized seed dealer for many of the leading vegetable seed breeders and producers. Rupp Seeds and its seed suppliers employ Good Agricultural Practices in the production of commercial seed lots and every effort is made to minimize microbial contamination during production and processing. Seeds sold to Buyer are of adequate quality for use in raising a crop.

Rupp Seeds has contracted with a third party to manage pest control in its seed storage and processing facilities.

This is a continuing guarantee, subject to revocation only on written notice to Buyer.



Philip Rupp
President

October 1, 2022

NOTICE TO BUYERS

VARIETY DESCRIPTIONS

Variety descriptions and images presented in this catalog serve as a guideline only. They are provided for comparison purposes to help you plan your crop program and can be expected to vary to some degree depending upon location, soil type, environmental conditions, crop management practices, pest or pathogen presence, and other uncontrollable factors that may affect the expected performance. Descriptions in the catalog are the result of favorable growing conditions and identical results are not guaranteed.

Statements regarding a variety's response to a specific pest, pathogen, or stress are based on evaluation under select conditions. These reactions can be affected by the factors mentioned above, as well as new pathogen races, pest types or vectors for disease. Therefore, we give no warranty, express or implied, for crop performance relative to the information given; nor do we accept any liability for any loss, direct or consequential, that may arise from any cause. Read all seed package labeling carefully as it contains terms and conditions of sale.

LIMITATION OF WARRANTY AND LIABILITY

Rupp Seeds, Inc. ("Rupp Seeds") warrants that a representative sample of seed in this container (collectively "Seed") was tested and labeled at the time of initial packaging (or thereafter as indicated) and, at the time of such testing, conformed to the label description within recognized tolerances.

Disclaimer of Warranties: Rupp Seeds makes NO other warranty of any kind. THIS EXPRESS WARRANTY EXCLUDES ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING THE WARRANTY OF MERCHANTABILITY AND THE WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE. THERE ARE NO WARRANTIES WHICH EXTEND BEYOND THE DESCRIPTION HEREON. Rupp Seeds makes NO warranty that the Seed is free of seed-borne diseases, including but not limited to bacterial fruit blotch, or free of genetically modified organisms. All risks of nonperformance, reduced performance, or crop damage are assumed by User. As permitted by law, the Seed is sold "As Is."

Acceptance of Terms: Any person who buys, receives, opens the package or uses the Seed (collectively the "User") accepts and agrees to this Limitation of Warranty and Liability between User and Rupp Seeds. If User did not purchase the Seed directly from Rupp Seeds, User agrees that Rupp Seeds is a third-party beneficiary and is entitled to enforce this Agreement as if it had been entered into between User and Rupp Seeds. User agrees to accept full responsibility for the performance of the Seed and crop. IF USER DOES NOT ACCEPT THESE TERMS, USER MUST RETURN THE SEED IN THE UNOPENED CONTAINERS TO THE PLACE OF PURCHASE FOR A FULL REFUND WITHIN 30 DAYS OF RECEIPT.

Notice, Waiver and Indemnification Regarding Untreated Seed: Rupp Seeds may apply fungicide and/or insecticide treatments and/or biological seed enhancements to the Seed in an attempt to reduce the loss of plant stand or failure to establish a plant stand due to micro-organisms and insect attack during germination and plant establishment. Rupp Seeds does not warrant that any treatment will be effective. While Rupp Seeds will provide customers with untreated seed at their request, Rupp Seeds does not accept any liability for failure of such untreated seed to establish a stand. User acknowledges the risks associated with untreated seed, including when such seed is planted directly into field soil. User knowingly and voluntarily releases and waives any and all claims related to untreated seed against Rupp Seeds.

User will communicate the risks of use of untreated seed prior to User's sale or transfer of the Seed and will execute the same or similar agreement with any third party. USER WILL INDEMNIFY, DEFEND AND HOLD RUPP SEEDS HARMLESS FROM ANY AND ALL CLAIMS BY THIRD PARTIES ARISING FROM THE PERFORMANCE OF UNTREATED SEED.

Exclusive Remedy: User's Exclusive Remedy and Rupp Seeds' sole liability for any claim or loss, including, without limitation, claims resulting from breach of warranty, breach of contract, tort, fiduciary obligation, strict liability, or negligence resulting from the use of the Seed is limited to a refund of the price paid for the Seed and will not include incidental, consequential, or exemplary damages, such as loss of yield or lost profits. User agrees that Rupp Seeds' refund of the price paid for the Seed will not cause this Agreement to fail of its essential purpose. Allocation of risk between Rupp Seeds and User is reflected in the purchase price.

Immediate Notice: User must give Rupp Seeds immediate notice (no later than 15 days upon discovery) when User believes a Breach of Warranty exists, and User will fully cooperate with Rupp Seeds in any investigation.

Notice of Required Arbitration/Conciliation/Mediation Required by Various States: Under the seed laws of many states, arbitration, conciliation or mediation is required as a prerequisite to maintaining a legal action based upon the failure of seed to which this notice is attached to produce as represented. The User must file a complaint (sworn in some states) along with the required filing fee (where applicable) with the Commissioner or Secretary of Agriculture of the State within such time as to permit inspection of the crops, plants, or trees by the designated agency and the seedsmen from whom the seed was purchased. A copy of the complaint must be sent to Rupp Seeds by certified or registered mail, or as otherwise provided by statute in such State.

Technical Advice: Any technical advice regarding the use of the Seed by Rupp Seeds or any representative shall be with no warranty of results and Rupp Seeds expressly disclaims any warranty and liability for any technical advice or recommendation.

Product Data Limitations: Product data and ratings are based on averages of results from various test locations. They are a summary of past results and not a prediction of future performance. Performance will vary depending on the actual environment, pathogen strain and management conditions in your field. Product data and ratings are the result of favorable growing conditions and identical results are not guaranteed, and Rupp Seeds make no warranty regarding the performance of the Seed in the User's field.

Use Restriction: The Seed is owned by, or licensed to, Rupp Seeds and Rupp Seeds strictly limits the sale and possession of the Seed to a grant to User of a non-exclusive right to use the Seed for the sole purpose of growing a single crop of plant parts for sale or use as a vegetable product. User shall not export, reproduce, multiply or breed the Seed, and shall not genetically analyze or manipulate in any way the Seed for any plants or plant parts produced from the Seed. User shall include this Agreement with any transfer of the Seed.

Jurisdiction and Venue: This Agreement is governed by and shall be construed in accordance with the laws of the State of Ohio. User agrees that all disputes arising out of or in connection with this Agreement must be resolved by a Court of competent jurisdiction in the County of Fulton, State of Ohio. User irrevocably submits to the exclusive jurisdiction of such Court for the purpose of litigating any and all such claims or disputes.

Severability: If any term of this Agreement is held to be unenforceable, all remaining terms will remain in effect and will be fully enforceable.

Entire Agreement: This Agreement is the entire Agreement between Rupp Seeds and User regarding warranties, liabilities and limitations on warranties and liabilities.

TERMS AND PAYMENT INFORMATION

PAYING FOR YOUR ORDER

We accept payment via credit or debit card, check (*please write "US Funds" on check*), and wire transfer. Open account terms and financing is available for qualifying customers. Payment discounts are available for select payment methods and products.

Credit Card

We accept the following credit cards as payment: Discover, MasterCard, or VISA. Please indicate which card you wish to use and furnish a complete card number, expiration date, 3-digit verification code, name on card, and billing address of the account holder. Your credit card will not be charged until your order is shipped. Credit card payments are not eligible for cash discounts.

Check

We accept business or personal checks, money orders, and cashier's checks which are eligible for payment discounts. Please refer to the Cash Discount Program for details.

If paying by check (please write "US Funds" on check), please allow 10 days for your check to clear the bank before your seed will be shipped.

A fee of \$25.00 will be charged for any check returned by the bank.

Wire Transfer

We do accept payment via wire transfers to our bank. Please contact our office for processing details.

There is a \$25.00 processing fee for wire transfers.

Open Accounts

Open account terms are available to qualifying customers. To establish credit terms, a customer must have a minimum of \$1000 in seed purchases, and a Rupp credit application must be completed and submitted for review. Please allow several weeks to process.

Payments on open account invoices are eligible for payment discounts. Please refer to the Cash Discount Program for details.

Invoice Terms

Payment in full is expected on or before the due date indicated on the invoice, not from the statement date.

Past due invoices will be charged a finance charge of 1.5% per month on the past due amount.

Any fees or legal expenses incurred in collecting unpaid accounts will be charged to the account to the extent permitted by law.

CASH DISCOUNT PROGRAM

Rupp Seeds offers a cash discount program as an incentive for early payment of your seed order or invoice.

Cash discounts are available for orders over \$350.00.

Use the following table to determine your discount rate for the month in which you are sending payment.

August	10.0%	January	5.0%
September . . .	9.0%	February	4.0%
October	8.0%	March	3.0%
November . . .	7.0%	April	2.0%
December . . .	6.0%		

Our cash discount program can be used in the following ways:

- A) Prepay on account – Make a payment on your account as prepayment for your expected purchases in the coming season.
- B) Pay with order – After you assemble and total your order, simply calculate and subtract the cash discount amount based on the month of payment and send a payment for the balance.
- C) Pay upon receipt of order acknowledgment – You can also receive a cash discount for payment after receipt of your order acknowledgment. Payment can occur at any time before your seed is shipped.

Please note the following details about cash discounts:

Cash discounts are only available on vegetable seeds. Cash discounts are not available for non-seed items including: seed treatments, clothing, accessories, planter plates, popping corn, supplies, freight charges, etc.

Cash discounts are not available on orders less than \$350 or for credit card, debit card, and COD.

Cash Discounts!
on orders
over \$350.00
see page 130 for details

5 WAYS to ORDER*

* Use only a **single method** to order.
(Example: If mailing order, don't place order online.)

PHONE:

1-800-700-1199
(M-F 8:00 am - 5:00 pm EST)

ONLINE:

www.ruppseeds.com

FAX:

419-337-5491

MAIL:

Rupp Seeds
17919 County Road B
Wauseon, OH 43567

EMAIL:

orders@ruppseeds.com

HOW TO ORDER

- Print clearly. Please correct any errors in your name and/or address and phone number. Be sure to provide both your billing address and your physical (911) address (where seed should be shipped) and phone number. If you have moved since your last order, please check mark the box for change of address and include your old address as well.
- For each item ordered, print the item number, quantity, package size (ex. 1/4lb. etc.), name of item and price for quantity ordered.
- Shipping and handling charge applies to **each** shipping address for orders under \$350.00.
- If the order is to be shipped to a different address, please indicate the name and address.
- Please include any required waivers or licensing information with your order.
- Please send check (*please write "US Funds" on check*), money order, VISA, Mastercard, or Discover. **Do NOT send cash.**
- To avoid delay in delivery, we advise ordering early. Our peak season runs from February through April. During this time orders received may take longer to be processed and shipped.

ORDERING INFORMATION

The majority of our seeds are **treated**. Items that are available untreated are indicated in the price tables with a 'U' at the end of the item number. Please be sure to include the 'U' when filling out your order form, if you desire untreated seed.

In case of either partial or total crop failure, we reserve the right to pro-rate delivery.

Prices are in US dollars. Prices are subject to change without notice.

Products are sold by the package size. For example: if you are ordering 7 pounds of sweet corn, you will need to order one - 5 pound package and two - 1 pound packages. These package sizes will be at different price breaks.

PAYING FOR YOUR ORDER

We accept payment via credit or debit card, check (*please write "US Funds" on check*), and wire transfer. Open account terms are available for qualifying customers. Payment discounts are available for select payment methods and products. See page 130 for more details on cash discounts and financing options.

Cash Discounts!
on orders
over \$350.00
see page 130 for details

SHIPMENT OF YOUR ORDER

All orders will be shipped after payment has been received. If you are paying by check (*please write "US Funds" on check*), please allow 7-10 business days for your check to clear.

A \$15.00 shipping and handling charge will be added to all orders less than \$350.

Orders shipped to Alaska, Hawaii, Puerto Rico and International shipments will be charged actual shipping charges.

Our preferred and standard method of shipping is UPS Ground.

We reserve the right to ship your order via the most economical carrier, so in addition to UPS we also utilize our own delivery trucks, truck line and the US Postal Service.

PICKING UP YOUR ORDER

If you would like to pick up your order, we require 24 hour advanced notice.

ON RECEIPT OF YOUR ORDER

INSPECT YOUR SHIPMENT

Please review the packing slip and contents upon receipt to confirm you have everything you need before planting time.

DAMAGED SHIPMENTS

A small percent of shipments may get damaged during transit. If you receive a damaged shipment, please be prepared to take action so you can receive proper credit or replacement. Our Customer Service department will file a claim with the shipping company and will need some information from you.

Here are guidelines to keep in mind and actions you should take to help expedite a claim.

- Take time when unloading. Count the packages and pieces received and look for any damaged shipping containers and packages.
- Tell the driver to note any shortage or damage on all copies of the freight bill, take pictures, and to sign their full name clearly.
- Immediately contact our office at 800-700-1199 and fax a copy of the freight bill along with a description of the damage, along with any pictures of other documents to 419-337-5491, or email it to us at orders@ruppseeds.com or mail it to us within 10 days.
- Include a note identifying the name and quantity of each variety that is missing or damaged.

RETURNS

Rupp Seeds has no control over the handling and care of the seed once it leaves our warehouse. In order to ensure quality seed for all of our customers, **we will not accept any seed returns** except in situations where an error has been made in fulfilling your order. In the event of an error, contact our office within 15 days of receipt of the order to obtain approval for the return.



Rupp Seeds Inc.
17919 County Road B
Wauseon, Ohio 43567

Watermelon Waiver

800.700.1199

FAX 419.337.5491

waivers@ruppseeds.com

NOTICE, WAIVER and COMPLETE RELEASE AGREEMENT

Bacterial Fruit Blotch (BFB) and Gummy Stem Blight (GSB) are serious diseases that have become significant risk factors in many areas where watermelons are grown. The Pathogens causing these diseases (Acidovorax avenae subsp. citrulli for BFB and Didymella bryoniae for GSB), and other watermelon diseases, can be introduced into a field by infested seed, infected transplants, volunteer watermelons, mechanical means, or natural spread from alternate hosts, or may already be present in the field on crop debris or in the soil. While it is impossible to conduct testing procedures that will give 100% reliable results with regard to the identification of any seedborne pathogen, Rupp Seeds' suppliers test all of their watermelon seed lots for commercial sale.

Depending on the supplier, a representative sample of seeds from each watermelon seed lot has been tested pursuant to current industry standards, and no symptoms of these Pathogens were found to be present within the known limits of detection in the sample tested. Rupp Seeds understands that its suppliers have tested representative samples of all watermelon seed lots covered by this agreement and have not detected the presence of the Pathogens in any such representative samples. Notwithstanding the above, Rupp Seeds cannot and does not guarantee or warrant that such tests are totally conclusive nor that the seeds are free of the Pathogens and, further, cannot and does not guarantee or warrant that the Pathogens may not be introduced to such seeds and/or watermelon plants from outside sources at a later time.

GROWER'S RELEASE OF ALL LIABILITY FOR BACTERIAL FRUIT BLOTCH.

Acknowledging the above, Grower still wishes to purchase watermelon seeds, and Grower is willing to assume all risks of loss associated with these Pathogens. Accordingly, Grower hereby fully and unconditionally releases Rupp Seeds and its suppliers from any and all liability with respect to the presence of the Pathogens on or within such seeds, or the vulnerability of such seeds, to the Pathogens. Grower acknowledges and agrees that Rupp Seeds and its suppliers shall have no responsibility or liability for any losses or damages relating in any way to the Pathogens under any legal theory including, but not limited to, negligence, breach of warranty, breach of contract, or strict products liability.

Rupp Seeds acknowledges that all other aspects of its express warranty, as contained on the label, do apply, and that any waiver or limitation on the Rupp Seeds express warranty resulting from the terms and conditions of this Agreement, only apply to the presence on or within, or vulnerability of such seeds, to the Pathogens. Grower further agrees that Rupp Seeds and its suppliers also have no liability or responsibility for its watermelon seeds or plants grown therefrom if they are contaminated with the Pathogens after the seeds are delivered to Grower. Grower acknowledges that contamination may occur in a transplant house, in the field, or under circumstances beyond the control of Rupp Seeds and for which Rupp Seeds is not liable to Grower.

GROWER'S SOLE AND EXCLUSIVE REMEDY FOR ANY CLAIM WITH RESPECT TO THE SALE OF SEEDS IS LIMITED IN ALL EVENTS TO A REFUND OF THE PURCHASE PRICE OF THE SEEDS. Grower shall not be entitled to any incidental or consequential damages, including planting or replanting costs, lost profits, or any other expenses, losses or damages. Notice of any claim must be received by Rupp Seeds by registered mail within thirty (30) days after the alleged defect in the seeds becomes apparent to Grower.

GROWER'S AGREEMENT NOT TO RESELL SEEDS OR PLANTS.

In consideration for Rupp Seeds or its suppliers agreeing to sell watermelon seeds to Grower, Grower hereby agrees that it/he/she will only use such seeds for plantings on its/his/her own holdings, and will not, under any circumstances, sell, transfer, distribute or in any way dispose of any such seeds or seedlings grown from the seeds, with or without consideration, to any third party.

GROWER'S INDEMNIFICATION AGREEMENT.

Grower acknowledges that in the event it/he/she breaches the terms and conditions of the fourth paragraph of this Agreement with respect to the distribution of such watermelon seeds to a third party, Rupp Seeds and their suppliers could incur liability to such third parties. Therefore, Grower hereby unconditionally agrees to defend and indemnify Rupp Seeds and any of its suppliers, from any and all loss, liability, or damage which Rupp Seeds and any of its suppliers, may incur, including, but not limited to reasonable attorney's fees, relating to any claim by a third party who received any portion of the watermelon seeds which are covered by this Agreement as sold by Rupp Seeds to Grower.

ADDITIONAL NOTICE regarding TRIPLOID HYBRID WATERMELON.

Triploid hybrid watermelons are sterile hybrids which characteristically produce fruits with few or no true seeds. Because the absence, or relative absence, of hard or true seeds in the flesh of the melon is its chief distinguishing characteristic, the triploid hybrid watermelon is often referred to as a "seedless" watermelon. Despite this popular perception, triploid hybrid watermelons are not true "seedless" watermelons. The first melons to ripen in a field of triploid hybrid watermelons often contain small, undeveloped seeds. In addition, certain genetic, cultural and climatic factors are known to cause the formation of empty seed coats (small, white, undeveloped seeds), also called "pips", and/or hard seeds in the flesh of the melons. Due to the wide variety of possible causes of hard seed formation, TRIPLOID HYBRID WATERMELONS ARE NOT GUARANTEED TO PRODUCE SEEDLESS FRUIT.

GROWER UNDERSTANDS THIS AGREEMENT.

Grower represents and warrants that it/he/she has consulted with or had an opportunity to consult with an attorney, and that Grower fully understands the meaning and legal effect of this Agreement.

Continued on the back side.

ALL OTHER TERMS OF THE LABEL APPLY.

Except as expressly provided within this Agreement, all remaining terms, disclaimers, limitations, and conditions of purchase as disclosed and set forth on the Rupp Seeds label and on the Rupp Seeds Notice to Purchase Regarding Liability shall apply to the Grower's purchases of watermelon seed.

CHOICE OF LAW AND CHOICE OF FORUM.

The parties agree that this Agreement is entered into the County of the applicable Rupp Seeds supplier and shall be construed in accordance with the laws of that state. It is further agreed that any litigation by and between Grower and Rupp Seeds, or with a Rupp Seeds supplier, relating to the sale of all such watermelon seeds hereunder, shall take place in the county of the applicable Rupp Seeds supplier.

ATTORNEY'S FEES.

In the event that Rupp Seeds or its supplier enforces any terms of this agreement in any litigation with Grower, Rupp Seeds and its supplier shall be entitled to recover reasonable attorney's fees from Grower.

SEVERABILITY.

The invalidity or unenforceability of any particular provision of this Agreement shall not affect the other provisions hereof, and the Agreement shall be construed in all respects as if such invalid or unenforceable provisions was omitted. Grower has read the above Notice, Waiver, and Complete Release Agreement, understands it, and agrees to be bound by all of its terms. Grower understands this Agreement is part of the contract and a condition of sale, and that no shipment from will occur until Rupp Seeds receives this signed notice.

Rupp Seeds Inc.

Signature _____

Date _____

I have read and understand this release agreement and I agree to be bound by all of its terms. Please fill out completely and sign below.

Customer Number _____

Customer Name _____

Address 1 _____

Address 2 _____

City _____

Province _____ Postal Code _____

Phone # _____

Fax # _____

Printed Name _____

Title _____

Signature _____

Date _____



SEE WHAT GOOD YIELDS®

Release Agreement – Gold Dust

For seed below Rupp quality standards

We are informing you that Gold Dust pumpkin, lot number PCH1518 (herein Seed) is below Rupp Seeds (herein Rupp) quality standards, in that it contains offtypes and may produce up to 15% fruit that vary in shape, color and size. Rupp is offering the Seed at a 15% discount.

By signing this agreement, the Customer understands the Seed is below standard, agrees to purchase the Seed and understands the Seed is not returnable. The Customer further agrees to release Rupp of any and all claims or liability arising from the use of the Seed, and to indemnify and hold harmless Rupp from any claims by third parties arising out of the planting of the Seed.

CUSTOMER

Signature: _____

Printed: _____

Date: _____

Farm/Business
Name: _____

Address: _____

Phone: _____

ATTRIBUTE STEWARDSHIP AGREEMENT

Section A GROWER INFORMATION – Complete This Section – PLEASE PRINT CLEARLY		YOU, THE UNDERSIGNED GROWER, HEREBY ACKNOWLEDGE AND AGREE THAT: (1) YOU HAVE READ, UNDERSTAND, AND AGREE TO THE TERMS AND CONDITIONS OF THIS AGREEMENT INCLUDING BUT NOT LIMITED TO THE GROWER'S LIMITED USE LICENSE(S) AND GROWER RESPONSIBILITIES SECTIONS; (2) THIS IS A LEGALLY BINDING CONTRACT; (3) YOU ARE FULLY AUTHORIZED TO ENTER INTO THIS STEWARDSHIP AGREEMENT; AND (4) YOU ARE VOLUNTARILY ENTERING INTO THIS STEWARDSHIP AGREEMENT.			
Grower Name (Last, First, MI) _____ Farming or "Doing Business As" (d/b/a/ Name): _____ Address: _____ City: _____ State: _____ Zip Code: _____ Business Phone: _____ County: _____ E-mail Address: _____ (CANADA Only) Dealer Name: _____					
Return Agreement using one of the following methods – please keep a copy for your records: <table style="width: 100%; border: none;"> <tr> <td style="width: 50%; vertical-align: top; padding: 5px;"> US Growers: Mail: AgCelerate P.O. Box 221679 Charlotte, NC 28222-1679 Email: Agreements@agdata.com Fax: 1-704-919-5581 Online: agcelerate.com </td> <td style="width: 50%; vertical-align: top; padding: 5px;"> CANADA Growers: Mail: Syngenta Seeds, LLC Attn. Stewardship P.O. Box 959 Minneapolis, MN 55440 Email: syngenta.stewardship@syngenta.com Fax: 1-800-858-8664 </td> </tr> </table>			US Growers: Mail: AgCelerate P.O. Box 221679 Charlotte, NC 28222-1679 Email: Agreements@agdata.com Fax: 1-704-919-5581 Online: agcelerate.com	CANADA Growers: Mail: Syngenta Seeds, LLC Attn. Stewardship P.O. Box 959 Minneapolis, MN 55440 Email: syngenta.stewardship@syngenta.com Fax: 1-800-858-8664	
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(Individual at farm level responsible for planting)					
<table style="width: 100%; border: none;"> <tr> <td style="width: 50%; background-color: #ffff00; padding: 5px;"> Grower Name (Please Print Clearly) </td> <td style="width: 50%; padding: 5px;"> Thank you for choosing one or more of the Licensed Technologies. If you have any questions regarding the Licensed Technologies, please call 1-866-796-4368. For questions regarding this Agreement, please call: 1-877-GRO-CORN (1-877-476-2676). </td> </tr> </table>		Grower Name (Please Print Clearly)	Thank you for choosing one or more of the Licensed Technologies. If you have any questions regarding the Licensed Technologies, please call 1-866-796-4368. For questions regarding this Agreement, please call: 1-877-GRO-CORN (1-877-476-2676).		
Grower Name (Please Print Clearly)	Thank you for choosing one or more of the Licensed Technologies. If you have any questions regarding the Licensed Technologies, please call 1-866-796-4368. For questions regarding this Agreement, please call: 1-877-GRO-CORN (1-877-476-2676).				

This Stewardship Agreement ("Stewardship Agreement") is entered into between you ("Grower") and Syngenta Seeds, LLC ("Syngenta"). By signing and returning this Stewardship Agreement without modification (other than Section A above), Syngenta grants Grower a limited license to use the proprietary technology Bt11 and/or the Bt11 x MIR162 x GA21 stack (each, a "Licensed Technology") embedded in Syngenta's sweet corn seed product or in any seed product distributed by a third party Syngenta-licensee (collectively, "Seed Product"). Any proposed changes to this Stewardship Agreement other than in Section A are hereby rejected by Syngenta and shall have no effect unless approved in writing by Syngenta.

STEWARDSHIP

Grower acknowledges receipt of the applicable Attribute® Grower Guide ("Crop Guide") which is incorporated herein by this reference and may be updated from time to time and found at <http://www.syngenta-us.com/seeds/vegetables/commercial-sweet-corn>. Grower agrees to periodically check the website for the current Crop Guide and to read and comply with the then current Crop Guide. If Grower uses any Licensed Technology after Syngenta's release of a new version of the Crop Guide or Stewardship Agreement then Growers use shall be deemed an acknowledgement of receipt and agreement to comply with the then current: (i) Crop Guide, (ii) Stewardship Agreement, and (iii) the terms and conditions on the Seed Product packaging (collectively, the "Agreement"). The collective Agreement constitutes the entire agreement between Grower and Syngenta regarding the purchase and/or use of Licensed Technology and supersedes any other terms and conditions whether express or implied.

GROWER'S LIMITED USE LICENSE(S). Grower agrees that the Licensed Technology is protected under one or more U.S. patents (the "Patents"). Once this Stewardship Agreement is signed by the Grower then the Grower is granted the limited right, under the applicable Patents, to purchase and plant sweet corn Seed Products containing the Licensed Technology in the United States or Canada (the "Territory") but strictly according to the terms of the entire Agreement. Grower agrees that any Seed Product acquired in the Territory shall only be planted in the Territory. Further, Grower agrees not to plant Seed Product in the Territory which was acquired outside of the Territory.

GROWER RESPONSIBILITIES. Grower shall: (a) use Seed Products solely for planting a single commercial crop of fresh produce, forage or grain for food, feeding or processing; (b) not supply, transfer, resell, license or sublicense any Seed Products to any other person or entity for planting or any other purpose; (c) not to save any crop produced from Seed Products for planting by Grower or any other person or entity; (d) abide by the terms of the entire Agreement, as it may be updated from time to time as described above; (e) report to Syngenta the number of acres and the location (county and state) where the Seed Product is planted within 45 days of planting; (f) communicate all applicable stewardship requirements and obligations to any of its employees and agents with respect to handling of or work involving Seed Products and/or the crop produced from Seed Products, and monitor such employees' and agents' compliance with Grower's responsibilities under the entire Agreement; and (g) not use or allow others to use Seed Products, the crop produced from Seed Products, the Licensed Technology or any plant material containing the Licensed Technology for: (i) crop breeding, (ii) research (including, without limitation, agronomic testing or generation of cooperative data against sweet corn seed not containing the Licensed Technology), (iii) generation of registration data or production of Seed Product (unless Grower has entered into a valid, written production agreement with a licensed seed company expressly authorizing one or more of these actions).

TERM AND TERMINATION. This Stewardship Agreement, once signed by Grower and accepted by Syngenta, will remain in effect until terminated by Grower or Syngenta. This Stewardship Agreement may be terminated by either party at any time for any reason by sending written notice of termination to the other party at the address for such party specified above. In the case of termination of this Stewardship Agreement by Grower, such notice of termination must include Grower's full name and address and Grower must immediately cease using any Licensed Technology. Further, Syngenta may terminate this Agreement for failure of Grower to fully comply with the Grower Responsibilities described above. If Grower violates any terms of this Stewardship Agreement, in addition to other remedies available to Syngenta and any owner of the Patents listed above, Grower may forfeit any right to obtain a license to the Licensed Technology in the future. If this Stewardship Agreement is terminated then Grower will no longer have a right to purchase or use Seed Products, but, Grower's obligations (including but not limited to the above Grower Responsibilities) and Syngenta's rights that arose under the Agreement prior to termination shall remain in effect.

LIMITATIONS OF WARRANTIES AND REMEDIES. Grower agrees that the Limitations of Warranties and Remedies expressly stated on the Seed Product packaging shall be incorporated in this section as if set forth in full.

GENERAL PROVISIONS.

- This Stewardship Agreement and the parties' relationship shall be governed by the laws of the state of Minnesota and the United States (other than the choice of laws rules).
- Grower's rights may not be transferred to any other person or entity without the prior written consent

REMEDY SWEET CORN – SUPPLEMENTAL AGREEMENT

Section A							
GROWER INFORMATION – Complete This Section - PLEASE PRINT CLEARLY							
Grower Name (Last, First, MI) _____ Farming or "Doing Business As" (d/b/a/ Name): _____ Address: _____ City: _____ State: _____ Zip Code: _____ Business Phone: _____ County: _____ E-mail Address: _____ Customer ID #: <u>(Assigned by Syngenta)</u> Technology #: <u>(Assigned by Syngenta)</u> Dealer Name: Rupp Seeds, Inc. Dealer Number: _____ (Office Use Only) Dealer Phone: 419-337-1841 Third Party Syngenta-Licensee: _____ (Office Use Only)	YOU, THE UNDERSIGNED GROWER, HEREBY ACKNOWLEDGE AND AGREE THAT: (1) YOU HAVE READ, UNDERSTAND, AND AGREE TO THE TERMS AND CONDITIONS OF THIS SUPPLEMENTAL AGREEMENT; (2) THIS IS A LEGALLY BINDING CONTRACT; (3) YOU ARE FULLY AUTHORIZED TO ENTER INTO THIS SUPPLEMENTAL AGREEMENT; AND (4) YOU ARE VOLUNTARILY ENTERING INTO THIS SUPPLEMENTAL AGREEMENT. <table style="width: 100%; border-top: 1px solid black;"> <tr> <td style="width: 50%;">Grower Signature</td> <td style="width: 50%;">Date</td> </tr> <tr> <td colspan="2">(individual at farm level responsible for planting)</td> </tr> </table> <table style="width: 100%; border-top: 1px solid black;"> <tr> <td style="width: 100%; background-color: #ffff00;">Grower Name (Please Print Clearly)</td> </tr> <tr> <td> Thank you for choosing one or more of the Licensed Technology. Return this Supplemental Agreement to the address shown below. If you have any questions regarding the Licensed Technology, your Stewardship Agreement or this Supplemental Agreement please call: 1 (877) GRO-CORN or 1 (877) 476-2676. Please return the agreement back to your Dealer at: Fax to : 419-337-5491 Mail to: Rupp Seeds, Inc. 17919 County Road B Wauseon OH 43567 Email: waivers@ruppseeds.com </td> </tr> </table>	Grower Signature	Date	(individual at farm level responsible for planting)		Grower Name (Please Print Clearly)	Thank you for choosing one or more of the Licensed Technology. Return this Supplemental Agreement to the address shown below. If you have any questions regarding the Licensed Technology, your Stewardship Agreement or this Supplemental Agreement please call: 1 (877) GRO-CORN or 1 (877) 476-2676. Please return the agreement back to your Dealer at: Fax to : 419-337-5491 Mail to: Rupp Seeds, Inc. 17919 County Road B Wauseon OH 43567 Email: waivers@ruppseeds.com
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This Supplemental Agreement ("Supplemental Agreement") is entered into between you ("Grower") and Syngenta Seeds, LLC ("Syngenta") and supplements the terms and conditions of your Stewardship Agreement with Syngenta (by its predecessor-in-interest, Syngenta Seeds, Inc.). By signing and returning this Supplemental Agreement without modification (other than Section A above) and pursuant to the terms of this Supplemental Agreement and the Stewardship Agreement, Syngenta grants Grower a limited license to use the proprietary technology Bt11 x MIR162 x GA21 stack (the "Licensed Technology") embedded in Syngenta's "Remedy" sweet corn seed product or in any seed product distributed by a third party Syngenta-licensee (collectively, "Seed Product"). Any proposed changes to this Supplemental Agreement other than in Section A are hereby rejected by Syngenta and shall have no effect unless approved in writing by Syngenta.

TERM AND TERMINATION. This Supplemental Agreement, once signed by Grower and accepted by Syngenta, will remain in effect until either terminated by Grower or Syngenta, or will be terminated automatically upon the termination of your Stewardship Agreement. This Supplemental Agreement may be terminated by either party at any time for any reason by sending written notice of termination to the other party at the address for such party specified herein. In the case of termination of this Supplemental Agreement by Grower, such notice of termination must include Grower's full name and address. If Grower violates any terms of this Supplemental Agreement and/or Grower's Stewardship Agreement, in addition to other remedies available to Syngenta and any owner of the Patents (as defined in the Stewardship Agreement), Grower may forfeit any right to obtain a license to the Licensed Technology in the future. If this Supplemental Agreement is terminated then Grower will no longer have a right to purchase or use Seed Product, but, Grower's obligations (including but not limited to the Grower Responsibilities as set forth in the Stewardship Agreement) and Syngenta's rights that arose under the Stewardship Agreement and this Supplemental Agreement prior to termination shall remain in effect.

ACKNOWLEDGEMENT; LIMITATION OF WARRANTIES AND REMEDIES. Grower acknowledges and understands that Grower has been informed that under certain stress conditions, Remedy sweet corn may exhibit tassels and or glumes (male parts) growing out of the ear (female part) (the "Notice"). By its signature on this Supplemental Agreement, Grower acknowledges and agrees:

- Grower has been duly informed of the Notice;
- Grower accepts the Seed Product "as is", "where is" and with all faults and to assume all risks associated with use of the Seed Product and any actual or perceived impact on any crop yield or quality, and Grower will indemnify and hold harmless Syngenta and Syngenta authorized Distributors, and their respective directors, officers, employees and affiliates from any claims related, directly or indirectly, to the performance or non-performance of the Seed Product and its impact on any crop yield or quality; and
- Grower waives any and all claims and releases Syngenta and Syngenta authorized Distributors, and their respective directors, officers, employees and affiliates, from any and all liabilities relating, directly or indirectly, to the Notice and the use of the Seed Product.

GENERAL PROVISIONS.

- This Supplemental Agreement and the parties' relationship shall be governed by the laws of the State of Minnesota and the United States (other than the choice of laws rules).
- Grower's rights may not be transferred to any other person or entity without the prior written consent of Syngenta.

Syngenta Seeds, LLC Attn: Attribute Stewardship 11055 Wayzata Blvd., Minnetonka, MN 55305
 Email: syngenta.stewardship@syngenta.com
 Fax: 1-800-858-8664





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