

NEW PRODUCTS FOR 2024



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Dear Grower,

It's Tuesday, October 3rd, and on my drive to our farm this morning, a brilliant sunrise was highlighting ribbons of low hanging fog that was flowing along the contours of the fields awaiting harvest. I am amazed at the beauty of creation!

As I parked, I found myself running through a list of what I needed to tackle, along with everything else that was taking place this week – final catalog preparations are underway, the breeding team is collecting seeds from their 1,000s of hand pollinations this summer, seed increases are being harvested, the warehouse is getting ready, and much more.

On the heels of these thoughts, I was reminded, and then celebrating – we have an awesome team!

Many of you already know from your interactions with our outside sales team – their experience is invaluable. And you've certainly received great care from our inside sales team as they've helped you with your order. But you need to know that the rest of our team is just as wonderful and capable and motivated to do all they can to help you succeed.

As you know, there are many factors that can impact the health and yield of a crop. Nature will even occasionally throw a curve ball into the mix, such as smoke, that may impact a crop in unexpected ways. And costs of production and uncertain markets can make profitability a concern.

Even so, I trust you've met with success this past growing season. And I hope that when you reflect on the season, you'll have much to be thankful for and encouraged by.

Please be assured that we're keeping these challenges in mind as we carefully review and select products. We're looking for great products at various price points to provide you with options, doing what we can to help you manage your costs of production.

Also, we're continuing to offer our cash discount program and post-harvest financing programs to help you manage your cash flow options through the season.

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

Thank you for your business and the trust you place in us.

Please let us know how we can serve you better as we partner together.

Sincerely,

Philip Rupp

President



REGIONAL CONSULTANTS



George Wonnacott Ontario, Canada 866.619.Seed 519-286-9438 FAX georgew@ruppseeds.com



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Jeff Werner New England, New York 866.240.Seed 888.356.8299 FAX jeffw@ruppseeds.com



Phil Ramsey North Carolina, Tennessee, Virginia 540.250.2023 540.301.2644 FAX philwr@ruppseeds.com

Our team is ready to assist you in planning for this coming season. Feel free to contact the salesman in your area if you would like their assistance.

Outside of a consultant's territority? Contact our office (800-700-1199) and a representative will be happy to help you.

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.

PAYMENT DISCOUNTS

Payment discounts for orders over \$350.00.
Discounts available through April.
See page 130 for details.

FREE SHIPPING

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

INSIDE SALES



Kristen: x7098



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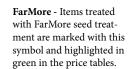
ICON KEY

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.



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.

Gynoecious - (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. 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?

This edition of our catalog features many 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?

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 builtin 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 more than 70 varieties of sweet corn roughly 25% are GMO. These include 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.

 $\label{pricing} \textit{Pricing table example. $``U"$ indicates untreated seed.}$

KALE			M=1,0	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



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 handpicking. 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

DARK HORSE NEW

DESPERADO

JADE II



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.







MOMENTUM

OUTLAW

SYBARIS

ASPARAGUS

אורעי	103	
		Features
13007	Walker Deluxe F1	Tight headed spears with slightly purple bracts. Impressive yields. High disease tolerance. Used for fresh market and processing.

ASPARAGUS				M=1,0	00 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 I	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 1/2"	DG	White	FM, S	BV ¹	High yielding. For market or shipping.
NEW 07120	Dark Horse 💜	58	5 1/4"	DG	White	FM, S	BV, A, HB, R	Dark Horse is a new high quality bean with dark green, straight pods and good upright plant habit. Expect a 3-4 sieve bean with improved standability that produces high-quality pods.
07033	Desperado 💜	53	5 ½"	DG	Brown	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 1/2"	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 1/4"	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.

BEANS BUSH GREEN Fresh Market									
2M	10M	20M	80M	800M*					
	4.60	4.35	4.15	3.90					
5.00	4.00	3.75	3.55	3.30					
5.30	4.30	4.05	3.85	3.60					
5.40	4.40	4.15	3.95	3.70					
	5.00 5.30	2M 10M 4.60 5.00 4.00 5.30 4.30	2M 10M 20M 4.60 4.35 5.00 4.00 3.75 5.30 4.30 4.05	2M 10M 20M 80M 4.60 4.35 4.15 5.00 4.00 3.75 3.55 5.30 4.30 4.05 3.85					

BEANS BUSH GREEN F	ket		M=1,0	000 seeds	
Price per 1,000 seeds (M)	2M	10M	20M	80M	*M008
07155 Jade II Cruiser		4.15	3.90	3.70	3.45
07005 Momentum Cruiser	5.55	4.55	4.30	4.10	3.85
07024 Outlaw Cruiser	5.35	4.35	4.10	3.90	3.65
07148 Sybaris ^{Cruiser}	5.45	4.45	4.20	4.00	3.75

 $[\]mbox{\ensuremath{^{\star}}}$ Multiple packages may be used to fill orders for these quantities.













BORSALINO

	and the same
JADE 📈	

BEANS		BUSH	GREEN	Heritaç	ge Varieti	es - Home C	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.
07048	Royal Burgundy	55	5 - 6"	Р	Buff		Better bush type than Royalty with longer, straighter, smoother pods. Limited Supply
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		YELLO	W WA	K				
Fresh Market	•	Days	Pod Length	Pod Shape	Pod Color	Seed Color	Disease	Features
riesii Warket								This is a larger sieve wax bean that has yellow pods
NEW 07157	Dawson Gold 💜	55	5"	Round	Υ	White	BV, R, A	and a robust yield.
08019	Sunburst 🔌	50	6"	Round	ВУ	White	BV, HB	A Seminis variety for local market or shipping. Long straight pods that are an attractive bright yellow. Concentrated set.
08005	SV1003GF Ò	56	5 1/4"	Round	Υ	White	BBS, BV	Has better color and a slightly longer pod than Gold Dust with a more upright plant. Consistent yielder.

BE	EANS		FRENC	H FILE	T				
		•	Days	Pod Length	Diameter	Pod Color	Seed Color	Disease	Features
	08018	Borsalino Baby Wax	60	4"	1/4"	Υ	White	A, BV	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.

BEA	. NS BUSH GREEN Herita	age				
	Priced per pound in these package sizes	1#	5#	25#	50#*	500#*
07135	Jade	8.65	7.65	7.40	7.25	7.10
07048U	Royal Burgundy Untreated	6.40	5.40			
07026U	Strike Untreated	6.25	5.25	5.00	4.85	4.70
	* Multiple packages may be used to fill or	ders for the	ese quanti	ties.		

BEANS YELLOW WAX	EANS YELLOW WAX								
Price per 1,000 seeds (M)	2M	10M	20M	80M	800M*				
07157 Dawson Gold Cruiser	8.80	7.80	7.55	7.35	7.10				
08019 Sunburst Cruiser	5.55	4.55	4.30	4.10	3.85				
08005 SV1003GF Cruiser	5.60	4.60	4.35	4.15	3.90				
* 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 Untreated	6.15	5.15	4.85	4.65

BEANS FRENCH FILET		M=1,000 s				
Price per 1,000 seeds (M)	2M	10M	20M	100M		
08018 Borsalino	6.35	5.60	5.35	5.10		

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 straighter 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



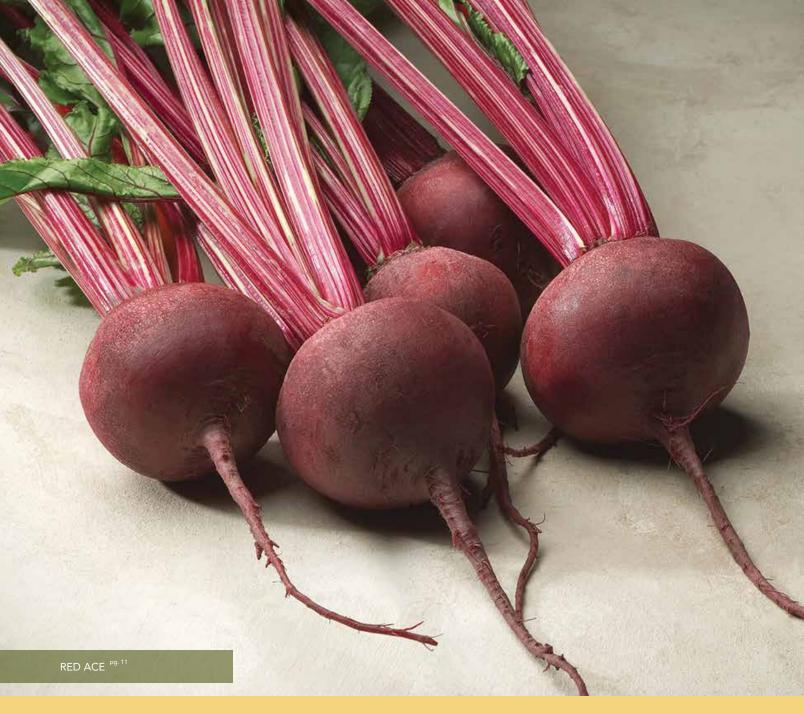
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BEANS			DRY SHELLING							
	A	Days	Seed Color	Bean Type	Plant Type	Disease	Features			
09032	Cabernet	91	Dark red	Kidney	Determinate Bush	BV	Mid season Kidney Bean. High quality and yield, excellent dark red color.			
09031	Etna	88	Red flecks on off white	Cranberry	Determinate Bush	BV	An early season Cranberry Bean. Large seeded and high yield potential.			
09033	SV1893GH	102	White	Navy	Determinate Bush	BV	Main season, high yield, a high quality Navy bean.			
09034	SV6139GR	90	Brown flecks on buff	Pinto	Indeterminate Short Vine	BV	Early maturing Pinto bean. Short vine on an upright plant, great quality and color.			

BEANS	GREEN	RUNN	IER				
	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 commer- cial favorite.

BEANS DRY SHELLING			M=1,0	1,000 seeds	
Price per 1,000 seeds (M)	2M	10M	20M	40M	
09032U Cabernet Red Kidney Untreated	5.55	4.55	4.30	4.10	
09031U Etna Cranberry Untreated	10.45	9.45	9.20	9.00	
09033U SV1893GH Navy Untreated	4.75	3.75	3.50	3.30	
09034U SV6139GR Pinto Untreated	5.00	4.00	3.75	3.55	

BEANS GREEN RUNNER				
Priced per pound in these package sizes	1#	5#	25#	50#
07118 Volunteer Half Runner	6.45	5.45	5.15	4.95



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.



14101

Detroit Dark Red

CHIOGGIA

GUARDSMARK









A very popular, tender, dark red beet used by many home gardeners.

TOUCHSTONE GOLD

BEE	TS				
F t	80.1.1	_	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.
NEW	14108	Golden Boy	89-90	12-15%	Golden Boy features extremely uniform roots and a bright yellow color. Golden Boy produces high yields and maintains a consistent quality while offering disease and drought resistance.
	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.
NEW	14116	Schrute F1	60	12-15%	A fast-growing, globe shaped hybrid with moderately zoned flesh, extremely smooth skin, and strong tops. These attractive and flavorful roots are great for fresh market, bunching, 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.
Herita	age Varie	eties			
	14104	Cylindra	60	5 - 7%	Unique, long cylindrical shaped beet, excellent for slicing. Up to 8" long and 1 ¾" in diameter.

BEETS			M=1,	000 seeds
Price per 1,000 seeds (M)	5M	25M	250M	1,000M
14003 Camaro	1.52	1.43	1.37	1.33
14105 Chioggia Guardsmark F300	1.82	1.73	1.67	1.63
14108 Golden Boy F300	2.29	2.20	2.14	2.10
14011 Merlin F300	1.40	1.31	1.25	1.21
14002 Red Ace F300	1.40	1.31	1.25	1.21
14116 Schrute F300	1.50	1.41	1.35	1.31
14106 Touchstone Gold F300	3.03	2.94	2.88	2.84
Seed Size: 9 - 10 = 30,000 seeds per pound.				

58

5 - 7%

BEETS				
Priced per package	4 oz.			
Priced per pound in these package sizes		1#	5#	50#
14104U Cylindra Untreated	4.65	12.35	12.10	11.85
14101U Detroit Dark Red Untreated	4.65	12.35	12.10	11.85





BROCCOLI

PLANTING

For spring broccoli, plant in greenhouse in flats. Sow ¼" to ½" 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 sidedress 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

SORRENTO

BROCCO	LI						
	•	Days from Transplant***	Sowing Season	Head Size	Bead Size	Disease Code	Features
Fresh Market							Eastern Crown is an outstanding variety for the East Coast.
15009	Eastern Crown F1	74	Spring Summer	Medium	Small		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.
15051	Emerald Crown F1	78**	Spring	Medium	Medium Small	DM	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.
15044	Green Magic ^{F1}	75	Spring	Medium	Medium Small	DM	This summer type broccoli offers very good uniformity and hold- ing 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.
15001	Hancock ^{F1}	85	Spring Summer	Medium	Small		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.
15049	Imperial F1	85*,**	Spring	Medium	Small	DM	A Sakata variety that performs best during long day conditions. Good heat tolerance. Tight head with small, dark green beads.
15004	Millennium F1	88	Spring, Summer	Large	Extra Small		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.
15509	Sorrento Broccoli Raab	70	Spring, Fall	Large Florets			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.
		* Day length sensi ** Requires warm					tically slows down under cold temperatures.

BROCCOLI				M=1,0	000 seeds
Price per 1,000 seeds (M)	1M	5M	25M	100M	500M*
15009 Eastern Crown	12.05	11.45	11.10	10.70	10.50
15051 Emerald Crown	10.70	10.10	9.75	9.35	9.15
15044 Green Magic	9.35	8.75	8.40	8.00	7.80
15001 Hancock	9.50	8.90	8.55	8.15	7.95
15049 Imperial	9.85	9.25	8.90	8.50	8.30
15004 Millennium	11.20	10.60	10.25	9.85	9.65
Priced per package	1 oz.	4 oz.			
Priced per pound in these package sizes			1#		
15509 Sorrento Broccoli Raab	13.10	20.95	63.00		

*** Add 15-20 days for direct seeding.

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

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

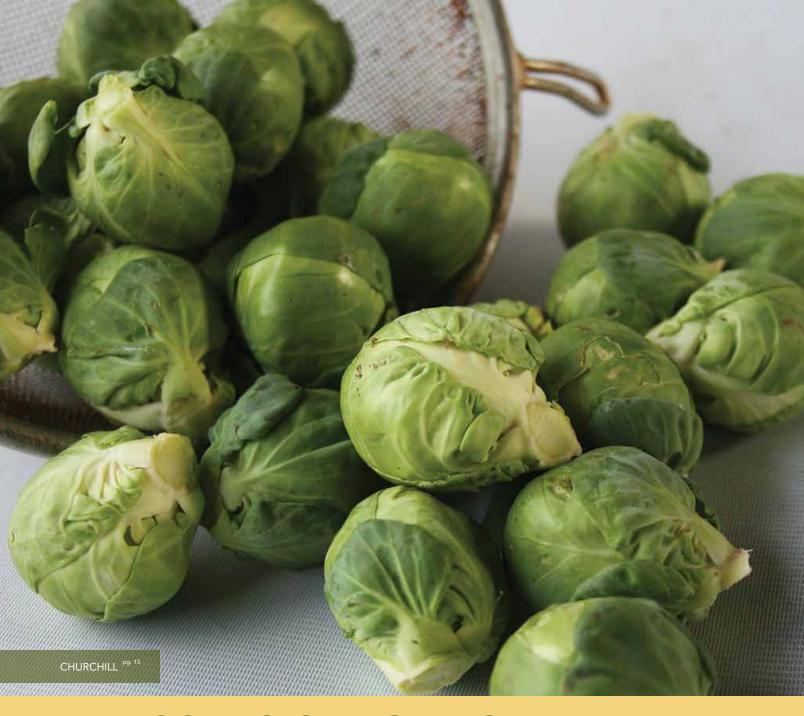
Green Magic is a great variety for early spring sowing.

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





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.









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.



CAPITOLA

CHURCHILL

RED BALL

BRUSSEL	S SPROUTS				
	•	Days	Sprout Size	Plant Size	Features
Fresh Market					
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 1/4"	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	3/4 - 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	15.60	14.95	14.65	14.20
16002 Jade Cross Regular	10.85	10.20	9.90	9.45
16502 Red Ball	6.15	5.50	5.20	4.75

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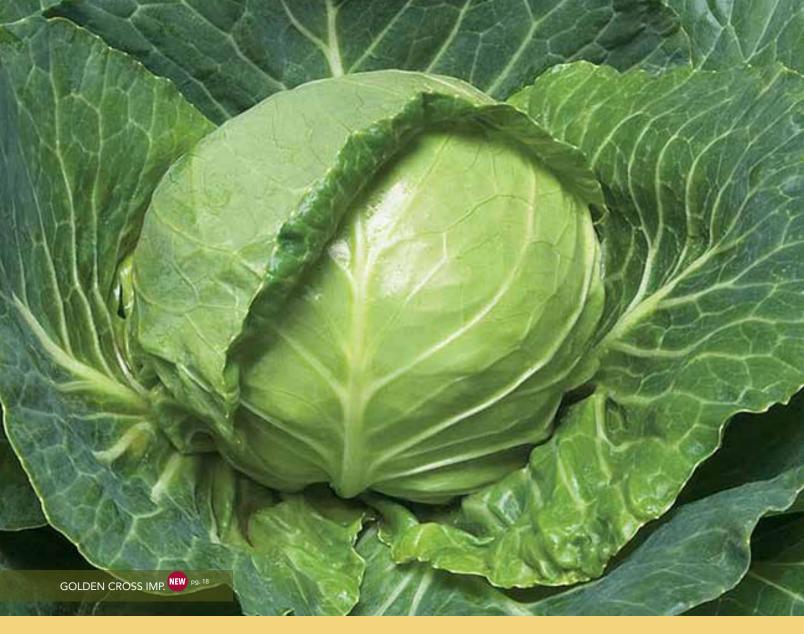
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CABBAGE

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

BLUE VANTAGE

XTREME VANTAGE

GRAND VANTAGE

STELLAR VANTAGE

CABBAGE	H	HYBRID					
		ays from	Head Weight pounds	Head Type	Color	Disease Code	Features
17069 Fast Va	antage 50	0	2 ½	Round	Medium Green		A very uniform hybrid that is slightly earlier than Headstart for the early cool season.
17005 Stone h	head 60	0	3 - 4	Round	Gray Green	TB	A popular, early hybrid for home garden or market. Solid, slow to burst heads.
17097 Platinu	um Dynasty 70	0	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.
17022 Blue V	'antage 80	0	3 - 4	Round	Blue Green	BR, BS, TB, YR	Early, main season hybrid, excellent appearance, disease tolerant and excess moisture tolerant. Excellent for fresh market or slaw.
17048 Cheers	s 80	0	4 - 6	Round	Blue Green	BR, YR	A hybrid with uniform heads, larger wrapper leaves. Disease resistant. Compare to Blue Vantage.
17011 Xtrem	e Vantage 80	0	5 - 6	Round	Blue Green	BR, TB, YR	Very good uniformity in field. Has a good disease package.
17116 Grand	Vantage 85	5	5 - 6	Round	Blue Green	TB, YR ¹	An exciting fresh market variety with attractive green to blue-green color. Very round head 7×7 ", heavy weight, dense solid interior and short core. Tight wrapper leaves. Good holding ability and excellent yield.
17009 Stellar	r Vantage 85	5	5	Round	Blue Green	BR, YR¹	Mid-late maturity with compact heads and short cores. Offers nice, dense heads and has good field-holding ability.

ALL-STARS 🌟 CABBAGE	
Blue Vantage has a great disease package with moisture tolerance for the early/main season.	
Fast Vantage Look no further for your early cool season planting.	4
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.	
Phil Ramsey Vegetable Consultant	
	ASS P

* Add 10-15 days for direct seeding.

CABBAGE Hybrid				M=1,0	000 seeds
Price per 1,000 seeds (M)	1M	5M	25M	100M	500M*
17022 Blue Vantage	6.65	6.05	5.45	4.85	4.75
17048 Cheers	7.85	7.25	6.65	6.05	5.95
17069 Fast Vantage	7.80	7.20	6.60	6.00	5.90
17116 Grand Vantage	9.35	8.75	8.15	7.55	7.45
17097 Platinum Dynasty	7.70	7.10	6.50	5.90	5.80
17009 Stellar Vantage	7.30	6.70	6.10	5.50	5.40
17005 Stonehead	7.10	6.50	5.90	5.30	5.20
17011 Xtreme Vantage	6.60	6.00	5.40	4.80	4.70
* Multiple packages may be used to	o fill orders fo	or these qua	ntities.		

































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.

GOLDEN CROSS NEW IMPROVED

17070 Red Jewel

RED DYNASTY

TOY CHOY

CABBAG	E	SPECIALTY Hybrid							
		▲ Days from Transplant*	Head Weight pounds	Head Type	Color	Disease Code	Features		
NEW 17098	Golden Cross Improved	40	2	Round	Green		A small-sized hybrid cabbage. Uniform globe heads are medium green and firm with a short core. Early bursting after full maturity. Recommended harvest spring to fall.		
17090	Red Dynasty	72	3 ½ - 5	Flat Round	Red	BR, TB	A Seminis red cabbage with the right size for fresh market plus intermediate black rot resistance.		

TB

Purple

Red

Round

* Add 10-15 days for direct seeding.

3 - 5

75

ABBAGE		OP - Her	OP - Heritage Varieties								
		Days from Transplant*	Head Weight pounds	Head Type	Color	Disease Code	Features				
	y Flat Dutch nswick	88	6 - 8	Flat Round	Dark Green		Popular home garden variety.				
17508 Late	Flat Dutch	105	Up to 30	Flat Round	Green		Good storage variety and one of the best for sauerkraut. Home garden.				

CABBAGE SPECIALTY	Hybrid			M=1,0	00 seeds
Price per 1,000 seeds (M)	1M	5M	25M	100M	500M
Golden Cross					
17098 Improved	8.95	8.35	7.75	7.15	7.05
17090 Red Dynasty	11.25	10.65	10.05	9.45	9.35
17070 Red Jewel	10.90	10.30	9 70	9 10	9 00

CABBAGE OP				
	Priced per package	1 oz.	4 oz.	1#
17512 Early Flat Du	tch Brunswick	6.45	9.80	19.45
17508 Late Flat Dut	ch	6.45	9.80	19.50

Sakata hybrid that is widely adaptable with very good holding ability. Excellent uniformity and yield potential.



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 2022/2024 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



www.ruppseeds.com/PSUext

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



Basics.

CABBAGE		CHINESI	CHINESE 🚳								
		▲ Days from Transplant*	Head Weight pounds	Head Type	Color	Disease Code	Features				
Fresh Market											
18010	Blues F1	57	4 - 5	Napa	Green	ALS, BS, DM	Extra slow bolting, high disease tolerance, superior performance in spring or early fall.				
18017	Yuki ^{F1}	67	4 - 5	Napa	Green	BS, CR, TB	Yuki is a medium maturing, China Pride type hybrid. Good uniformity and size.				
		* Add 10-15 day	s for direct seedi	ng.							

CABBAGE		CHINESE Pak-Choi					
		▲ Days	Head Type	Color	Features		
49013	Toy Choy F1	30 - 35	Celery	White	A compact hybrid Cantonese Pak Choi with thick, broad, milky white petioles and glossy, dark green leaves. Perfect for growers servicing Asian markets.		
49012	Joi Choi ^{F1}	35 - 40	Celery	White	First hybrid white stem. Slower bolting and higher yielding than OP's. Popular with the Chinese market.		

CABBAGE CHINESE			M=	=1,000 seeds
Price per 1,000 seeds (M)	1M	5M	25M	100M
18010 Blues	4.35	3.75	3.45	2.85
18017 Yuki	5.80	5.20	4.90	4.30

CABBAGE CHINESE Pak	-Choi		M=1,	000 seeds
Price per 1,000 seeds (M)	1M	5M	25M	100M
49012 Joi Choi	5.10	4.50	4.20	3.60
49013 Toy Choy	4.10	3.50	3.20	2.60

































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 tempera-

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 though soil crusting which in turn helps the carrots emerge.

HARVEST

Fresh market carrots are harvested when they are $\frac{3}{4}$ " - $\frac{1}{2}$ " 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

OLYMPUS

CARROTS		Hybrid				
	•	Maturity	Size	Туре	Interior	Features
19032	Bolero	Early	8"	Nantes	Orange	Bolero is a proven variety year in and year out as a versatile nantes suited for bunching, slicing and baby nantes markets.
19026	Enterprise	Early Main	12 - 14"	Imperator	Dark Orange	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.
19014	Gold Nugget	Medium Early	7.5 - 8"	Nantes	Yellow	Sweet flavor. Very uniform with high production. Medium vigor. Erected with a strong top and good aptitude for harvesting by top lifting.
19006	Musico	Early	7 - 8"	Nantes	Dark Orange	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.
19007	Olympus	Main	7 - 9"	Imperator	Dark Orange	Outstanding for bunching. Great color combined with a smooth finish. Very crisp texture and excellent flavor. Classy hybrid with high yield potential.
19009	Viper	Main	12 - 14"	Imperator / Cut & Peel	Bright Orange	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.

CARROTS	ОР							
A	Maturity	Size	Туре	Interior	Features			
19505 Little Finger	Early	3 - 4"	Baby	Bright Orange	Used for baby carrots.			

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	1.12	0.77	0.72	0.69
19014 Gold Nugget	1.64	1.29	1.24	1.21
19006P Musico Pelleted	1.74	1.39	1.34	1.31
19007 Olympus	1.06	0.71	0.66	0.63
19009 Viper	1.11	0.76	0.71	0.68

1#	5#
23.60	23.10



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.













DEPURPLE

FLAME STAR

SHAKARIS

CHEDDAR

CAULIFL	OWER						
		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 inter- nal wrap. It is mid-maturing with very uniform harvest. Twister seems to prefer heavier ground.
20014	Flame Star Fl	80	Semi Dome	Medium, Erect	Good	Spring, Summer	Beautiful semi-orange variety targeted to the specialty color mar- ket. 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	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=1,0	000 seeds
Priced per package	250 Seeds					
Price per 1,000 seeds (M)		1M	5M	25M	100M	500M*
20021 Cheddar	26.80	82.35	81.35	80.35	79.35	79.10
20013 DePurple	30.85	94.90	93.90	92.90	91.90	91.65
20014 Flame Star	30.85	94.90	93.90	92.90	91.90	91.65
20020 Freedom	12.70	39.00	38.00	37.00	36.00	35.75
20025 Graffiti	30.85	94.90	93.90	92.90	91.90	91.65
20015 Minuteman		18.85	18.20	17.75	17.30	17.20
20006 Shakaris		20.45	19.80	19.35	18.90	18.80
20009 Synergy		20.65	20.00	19.55	19.10	19.00
20003 Twister		18.05	17.40	16.95	16.50	16.40
* Multiple packages may be	used to fill	orders for t	hese quant	ities.		



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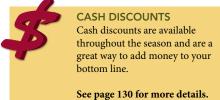
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W











TOP BUNCH 2.0

CH 2.0 VATES

HODSON

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

C	

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



CELERY		M=	1,000 seeds
Price per 1,000 seeds (M)	1M	10M	25M
21003P Hudson Pelleted	7.50	7.05	6.70
21001P Victoria Pelleted	7.50	7.05	6.70

	COL	LA	RDS
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R

Priced per package	1 oz.	4 oz.		
Priced per pound in these package sizes			1#	5#
22503 Flash	42.30	120.85	358.00	357.00
22501 Top Bunch 2.0	43.05	123.00	364.30	363.30
22001 Vates		Crop Fa	ilure	



Collards 24

Cucumbers

K
Kale 56
Kohlrabi 56
М
Mustard
P
Peppers Bell
Green to Red Sprinter
Other Colors Milena
Peppers Yellow Abay
Miscellaneous Sweet

Radish
Т
Tomato
Cherry
Chocolate Sprinkles 114
Gold Spark
Ruby Crush 114
Sweet Hearts
Tidy Treats
Fresh Market
Carolina Gold 112
Laguna Red 113
Rambler
Roadster
STM2255

Ho	ome Garden / B	e	do	iik	ng	1			
	Better Boy Plus								111
	Big Beef								111
	Big Beef Plus.								111
	Celebrity Plus								111
	Early Girl								111
	Early Girl Plus								111
	Lemon Boy Plus	S							111
	Pink Delicious								111
	RuBee Dawn .								111
	RuBee Goddes	S							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 handpollinate or purchase pollinators for release in the high tunnel. Contact Koppert Biological at 810-632-8750 or

www.ruppseeds.com/ <u>KoppertUS</u> 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



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CORN

PLANTING

Plant seeds 8 - 12 inches apart on 30 inch rows to achieve optimum yield. Seed depth should be 34" - 112" 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 <u>and</u> 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

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

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 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.

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 posititve 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.

SH2 / IMPROVED SUPER SWEETS CONTINUED

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.

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.

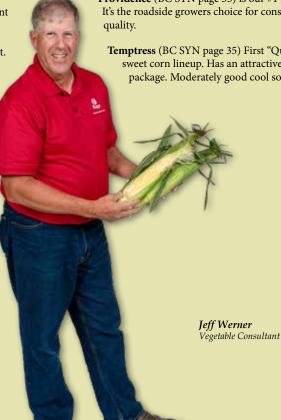
Cappuccino (BC SYN page 35) a 73 day variety with great cold soil tolerance for first and second harvest. Strong disease package to hold up against NCLB and rust as well as being a good rain gap planting in the mid to late season with later maturing varieties while still holding your markets eating quality.

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 emerge





































ANTHEM XR II



OBSESSION II



PASSION II



SV9010SA



STARFIGHTER II







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



 $\underline{https://www.ruppseeds.com/vegetables/sweet-}$ corn-guide

CORN	PERFORMANCE SERIES™						C	Can be sprayed with Roundup brand agricultural herbicide			
E		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 ½ - 8 x 1.9"	16 - 18	M	R	М	FM	**	Compare to Temptation. Has excellent cold soil tolerance for first or second earl plantings.
SH2											
03132	Anthem XR II	74	Bi-Color	8 x 1.8"	14 -18	R			FM, S	***	Enjoy the eating quality and rust pro- tection of Anthem XR along with added benefits of Roundup Ready and BT trait found in Performance Series sweetcorn.
03134	Tiger Shark II	74	Bi-Color	7 ½ x 1.9"	16 - 18	R		-	FM, S	***	Tiger Shark II is the newest midseason be color SH2 variety. Excellent eating quali mid-early maturity, long ear with refine kernels.
	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 Blipprotection.
03080	A. (=	80	Bi-Color	8 - 8 ½ x 1.8"	16 - 20	M	M	M	FM, S	***	Compare to Obsession. Straight SH2 typ 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	. .=	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 eati- quality of other high quality synergistic varieties.
		unique wee cides. Be su	d control ben	label and conf	up WeatherN	ΛΑΧ® an	d Round	dup Pow	erMAX® agri	cultural herbi-	Roundup 201/13/100/1





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 Earwom 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 traits.bayer.ca/en/stewardship or call 1-800-667-4944 to register for an application, or we can mail you a 2024 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 Cruiser	17.52	17.52
SH2		
03132 Anthem XR II Cruiser	19.71	19.71
03080 Obsession II Cruiser	19.80	19.80
03082 Passion II Cruiser	19.41	19.41
03125 Starfighter II ^{Cruiser}	19.23	19.23
03084 SV9010SA ^{Cruiser}	19.91	19.91
03086 SV9012SD ^{Cruiser}	19.14	19.14
03134 Tiger Shark II ^{Cruiser}	19.61	19.61
Synergistic		
04026 SV9014SB ^{Cruiser}	17.78	17.78

CORN PERFORMANCE SERIES IM	M=	1,000 seeds
Price per 1,000 seeds (M)	25M	100M
SE		
02138 Temptation II Cruiser	17.52	17.52
SH2		
03132 Anthem XR II Cruiser	19.71	19.71
03080 Obsession II ^{Cruiser}	19.80	19.80
03082 Passion II ^{Cruiser}	19.41	19.41
03125 Starfighter II Cruiser	19.23	19.23
03084 SV9010SA ^{Cruiser}	19.91	19.91
03086 SV9012SD ^{Cruiser}	19.14	19.14
03134 Tiger Shark II ^{Cruiser}	19.61	19.61
Synergistic		
04026 SV9014SB ^{Cruiser}	17.78	17.78

Cruiser®

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



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Cruiser treated items are highlighted in purple in the price tables. Look for this symbol in the product description tables marking Cruiser treated items.

INSECT RESISTANCE // HERBICIDE TOLERANCE									
	Seminis Performance Series™	Syngenta Attribute® I	Syngenta Attribute® Plus	Syngenta Attribute® II					
Key Sweet Corn Pest									
European Corn Borer	Е	Е	Е	Е					
Corn Earworm	VG*	F-G*	E*	E*					
Fall Armyworm	E	G	Е	Е					
Black Cutworm			VG	VG					
Additional Above-Ground P	ests								
Southwestern Corn Borer	Х		Х	Х					
Sugarcane Corn Borer	Χ		Х	Х					
Common Stalk Corn Borer	Х		X	X					
Southern Cornstalk Corn Borer	Х		Х	X					
Beet Armyworm			Х	Х					
Dingy Cutworm			Х	Х					
Western Bean Cutworm			Х	Х					
Additional Below-Ground P	ests								
Western Corn Rootworm	Х								
Northern Corn Rootworm	Х								
Mexican Rootworm	Х								
Protein	Cry1A.105, Cry2Ab	Cry1Ab	Vip3A, Cry1Ab	Vip3A, Cry1Ab					
Herbicide Tolerance	Glyphosate	Glufosinate	Glufosinate	Glyphosate Glufosinate					

Key: E= excellent, VG= very good, F-G= fair to good, G= good













WH 0809

BC 0528

BC 0805 CROWN

N PATRIARCH

BSS 0761

CORN		ATTRI	BUTE®	Insect Pi	rotectio	า				Can be sprayed with glufosinate herbicide.				
Synergistic		Relative Maturity	Color	Ear Size length x diameter	Kernel Rows	Rust	Stewart's	NLB	Use	Eating Quality	Features LINK V			
04018	WH 0809 🔌 🔼	80	White	8 ½ 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 ¼ 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.			
											oventional corn herbicides as well as Liberty {glufosinate} is 100% glufosinate with no other active ingredients.			
CORN		ATTRI	BUTE®	PLUS	nsect Pr	otect	ion				Can be sprayed with glufosinate herbicide.			
SH2 03230	Crown 143	78	Yellow	8 x 2"	16	R			FM, S	****	An Attribute Plus that is a strong uniform plant with uniform ears.			
03108	Patriarch ѝ 📶	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 💜 143	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 🔌 143	82	White	8 ¼ 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.			
											oventional corn herbicides as well as Liberty {glufosinate} is 100% glufosinate with no other active ingredients.			
CORN		ATTRI	BUTE®	II Insect	Protect	ion		Car	be spra	yed with	glufosinate and/or glyphosate herbicides.			
SH2 03225 Synergistic	Matriarch 143	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.			
	Quick Trip 🔌 143	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 recommended planting population 20,000 per acre.			
04057	Revision 143	76-78	Bi-color	8 x 1.8"	14 - 16		-		FM, S	***	Attrbute II, TripleSweet, Remedy replacement.			
04043	Remedy (1) 143 & 144	82	Bi-color	8 ½ 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.			
			Liberty {gl	® varieties mufosinate} he confirm that to hosate with	rbicides and the chemica	d glypho I you ar	osate he e sprayii	rbicides. ng is 100	Be sure to re	ad the	LIBERTY LINK 🖭			













REVISION REMEDY









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 aboveground 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.

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 Syngenta.

Documents Required:



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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

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

CORN ATTRIBUTE® Insect Protection	M=1,000 se		
Price per 1,000 seeds (M)	25M	100M	
Synergistic			
04207 BC 0528 Bi-Color Cruiser	16.65	16.65	
04019 BC 0805 Bi-Color Cruiser	16.02	16.02	
04018 WH 0809 White Cruiser	15.86	15.86	

CORN ATTRIBUTE II® Insect Protection	M=1,000 seeds			
Price per 1,000 seeds (M)	25M	100M		
SH2				
03225 Matriarch Bi-Color Cruiser	21.50	21.50		
Synergistic				
04055 Quick Trip Bi-Color Cruiser	20.71	20.71		
04043 Remedy Bi-Color Cruiser	20.67	20.67		
04057 Revision Bi-Color Cruiser	21.08	21.08		

CORN ATTRIBUTE PLUS® Insect Protection	on	M=1,000 seeds
Price per 1,000 seeds (M)	25M	100M
SH2		
03101 BSS 0761 Bi-Color Cruiser	19.49	19.49
03230 Crown Yellow Cruiser	21.47	21.47
03108 Patriarch Bi-Color Cruiser	20.84	20.84
Synergistic		
04042 Milky Way White Cruiser	20.54	20.54



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 2024 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.

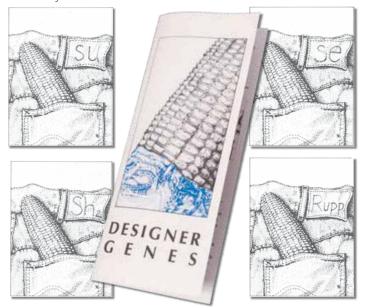
ISOLATION

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 <u>and</u> 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

- Shrunken (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

	Relative		
BI-COLOR	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
Temptress	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
Anthem XR	73	Improved Super Sweets	36
Cappuccino	73	Synergistic	35
Anthem XR II	74	SH2	28
Superb MXR	74	Improved Super Sweets	36
Tiger Shark II	74	SH2	28
Xanadu	74 - 75	Improved Super Sweets	36
Xtra Tender 274A	74	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
Troubadour XR	76	Improved Super Sweets	37
AP358	78	Improved Super Sweets	37
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 EX08767143	80	Improved Super Sweets	38
BSS 0761	80	SH2	30
Obsession II	80	SH2	28
Stamina MXR	80	Improved Super Sweets	38
BC 0528	81	Synergistic	30
Primus	81	Synergistic	35
SV9010SA	81	SH2	28
BC 0805	82	Synergistic	30
Providence	82	Synergistic	35
Remedy	82	Synergistic	30
Serendipity	82	Synergistic	35
Delectable	84	SE	34

WHITE	Relative Maturity	Genetic Type	Page #
Leadoff MXR	69	Improved Super Sweets	40
Eden RMN	74	Improved Super Sweets	40
Diamond Mine	76	Synergistic	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

	▲ Relative		
YELLOW	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
Passion II SV9012SD	81 83	SH2 SH2	28 28





































FASTLANE

TEMPTATION

LUSCIOUS TSW



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%

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.

G	

CORN		BI-COL	OR 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	М	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	М	FM, HG	***	A bi-color version of Bodacious with good vigor.
02178	Luscious Ò	75	15"	8 x 1.9"	16 - 18	М	М	М	FM, HG	***	A hybrid that produces an attractive blunt ear on an excellent plant package.
02132	Delectable	84	26"	9 x 2.1"	18	М	М	М	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 size:		5#	25#	50#	100#*			
02126 Ambrosia	21.20	19.95	19.60	19.20	18.90			
02132 Delectable	21.15	19.90	19.55	19.15	18.85			
Price per 1,000 seeds (M	2.5M	10M	25M	100M	500M*			
02189 Fastlane Cruiser	11.15	10.40	9.95	9.50	9.40			
02178 Luscious ^{Cruiser}	8.05	7.30	6.85	6.40	6.30			
02137 Temptation Cruiser	10.30	9.55	9.10	8.65	8.55			
* Multiple packages may be used to fill orders for these quantities.								

CORN BI-COLOR Syn	ergistic			M=1,	000 seeds
Price per 1,000 seeds (N.	() 2.5M	10M	25M	100M	500M*
04009 Allure Cruiser	14.25	13.50	13.05	12.60	12.50
04044 Cappuccino Cruiser	14.20	13.45	13.00	12.55	12.45
04039 Essence Cruiser	14.40	13.65	13.20	12.75	12.65
04032 Latte Cruiser	14.60	13.85	13.40	12.95	12.85
04021 Montauk Cruiser	13.65	12.90	12.45	12.00	11.90
04052 Nectar Cruiser	13.85	13.10	12.65	12.20	12.10
04210 Primus Cruiser	13.95	13.20	12.75	12.30	12.20
04214 Profit Cruiser	12.90	12.15	11.70	11.25	11.15
04014 Providence Cruiser	11.05	10.30	9.85	9.40	9.30
04020 QuickStart Cruiser	13.80	13.05	12.60	12.15	12.05
04013 Serendipity Cruiser	10.05	9.30	8.85	8.40	8.30
04049 Temptress Cruiser	13.65	12.90	12.45	12.00	11.90
* Multiple packages may be u	cod to fill order	. f	antitios		

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













LATTE

QUICKSTART

TEMPTRESS

PROFIT

CAPPUCCINO

ALLURE













NECTAR

ESSENCE

MONTAUK **PRIMUS**

PROVIDENCE

SERENDIPITY

CORN	BI-COL	.OR Syn	ergistic							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 心	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	М	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	М	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	М	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

SOLSTICE 🗡

HERO XR

IGNITION

CORN		BI-CO	LOR SH	12 Extra Sw	veet & In	nprov	ed S <u>u</u>	per S	weets _		Pricing on page 37
		Relative Maturity	Ear Height	Ear Size length x diameter	Kernel Rows	Rust	Stewart's	NLB	Use	Eating Quality	Features
0311	7 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. Toleran to HPPD/ALS.
0324	5 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.
0303	8 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 t HPPD/ALS.
0310	9 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.
0303	7 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 for a very attractive ear early in the season. Tolerant to HPPD/ALS.
0323	3 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 high quality ear.
★ 0321	5 Signature XR 🔌	72	27"	8 x 1.8"	16-18	R	-	-	FM	****	It has phenomenal IFSI Reserve 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.
0300	3 Anthem XR 🔌	73	24"	8 x 1.8"	16 - 20	R	M	М	FM, S	***	Excellent yield potential and better thar average lodging tolerance. Superb eating quality. Great all season long.
NEW 0324	6 Superb MXR 🔊	74	28"	8 X 1.9"	16-18	R	M	MS	FM, S	***	Superb MXR's large ear size, improved husk protection and ability to handle difficult growing seasons make it an excellent choice for mid-season fresh an shipping markets.
0311	9 Xanadu 🍑 🔊	74 - 75	25"	8 x 2"	16 - 18	R		R	FM, HG	****	Xanadu, being part of the Nirvana serie incorporates a stronger plant, higher ear placement and improved disease resistance while maintaining exceptiona eating quality and consumer appeal.
Ā	4 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.
0309	1 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





ANTHEM XR





UNIQUE TASTE & TEXTURE

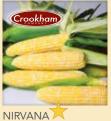
From the Nirvana series of sweet corn from Crookham.













XTRA TENDER 274A

CORN

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TROUBADOUR XR NEW

TEMPO XR

		Relative Maturity	Ear Height	Ear Size length x diameter	Kernel Rows	Rust	Stewart's	NLB	Use	Eating Quality	Features
03025	Nirvana 🍑 Ò	75	24"	8 x 1.8"	16	M		R	FM, HG	****	Combination of great vigor and emergence along with fantastic flavor and texture.
NEW 03123	Troubadour XR 💜	76	27"	8 x 2"	16-18	R		MS	FM, HG	****	Has excellent husk protection and exceptional eating quality.
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.
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.

BI-COLOR SH2 Extra Sweet & Improved Super Sweets

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

CORN BI-COLOR SH2 Extra Si	weet &	Improv	ed Sup	er Swe	ets
Price per 1,000 seeds (M)	2.5M	10M	25M	100M	500M*
03199 7143 EX 08767143 Cruiser	13.00	12.25	11.80	11.35	11.25
03003 Anthem XR Cruiser	14.75	14.00	13.55	13.10	13.00
03007 AP358 Cruiser	16.00	15.25	14.80	14.35	14.25
03245 Bolt XR ^{Cruiser}	15.95	15.20	14.75	14.30	14.20
03218 Cadence XR Cruiser	14.95	14.20	13.75	13.30	13.20
03091 Caliber XR ^{Cruiser}	14.20	13.45	13.00	12.55	12.45
03117 Catalyst XR ^{Cruiser}	15.20	14.45	14.00	13.55	13.45
03216 Crave Cruiser	12.05	11.30	10.85	10.40	10.30
03102 Cumberland Cruiser	13.00	12.25	11.80	11.35	11.25
03039 Enchanted Cruiser	13.95	13.20	12.75	12.30	12.20
03037 Hero XR ^{Cruiser}	14.15	13.40	12.95	12.50	12.40
03233 Ignition Cruiser	14.55	13.80	13.35	12.90	12.80

CORN BI-COLOR SH2 Extra S	weet &	Improv	ed Sup	er Swe	ets
Price per 1,000 seeds (M)	2.5M	10M	25M	100M	500M*
03038 Kickoff XR ^{Cruiser}	15.30	14.55	14.10	13.65	13.55
03025 Nirvana ^{Cruiser}	15.60	14.85	14.40	13.95	13.85
03235 Octane Cruiser	14.55	13.80	13.35	12.90	12.80
03215 Signature XR Cruiser	15.60	14.85	14.40	13.95	13.85
03109 Solstice ^{Cruiser}	15.40	14.65	14.20	13.75	13.65
03247 Stamina MXR Cruiser	15.40	14.65	14.20	13.75	13.65
03246 Superb MXR ^{Cruiser}	15.00	14.25	13.80	13.35	13.25
03122 Tempo XR ^{Cruiser}	15.35	14.60	14.15	13.70	13.60
03123 Troubadour XR Cruise	15.95	15.20	14.75	14.30	14.20
03119 Xanadu ^{Cruiser}	15.90	15.15	14.70	14.25	14.15
03174 Xtra Tender 274A ^{Cruiser}	13.25	12.50	12.05	11.60	11.50
* Multiple packages may be used to fill ord	lers for the	e quantiti	es.		









AP358

CADENCE XR

CRAVE

OCTANE 💢





ENCHANTED





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-CO	LOR SH	12 Extra Sv	veet & In	nprov	ed Su	per S	weets		Pricing on page 37					
		Relative Maturity	Ear Height	Ear Size length x diameter	Kernel Rows	Rust	Stewart's	NLB	Use	Eating Quality	Features					
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	М	M	FM, HG	***	Offers all the flavor and texture you would expect from an augmented farm market hybrid. Plump, sweet kernels.					
03199	7143 EX08767143 🔊	80	26"	8 x 1.9"	18 - 20	R	М	M	S	***	An improved version of Obsession that has a better rust package, eye appeal and eating quality.					
NEW 03247	Stamina MXR 👌	80	28"	8 X 2"	16-18	R		MS	FM, HG	****	A late season, fresh market variety with exceptional eating quality, strong tip fill, ideal ear size, and excellent disease package.					

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/sweetcorn-guide A

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DIAMOND MINE NEW

LEADOFF MXR

EDEN RMN

CORN	WHITE	Synergis	tic							
	Relative Maturity	Ear Height	Ear Size length x diameter	Kernel Rows	Rust	Stewart's	NLB	Use	Eating Quality	Features
03249 Diamond Mine	76	30"	8" X 1.8"	16-18			М	FM	****	Has exceptional eating quality and glossy white kernels This tall, sturdy plant has good ear height and features excellent tip fill and husk protection. White version of Nectar.
→ 04016 Mirage ②	78	18"	8 x 1.8"	16 - 18	M	М	М	FM	***	Excellent eating quality. High row count for a refined kernel. High yield potential. White version of Essence.

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	CORN		WHITE	SH2 I	Extra	Sweet	& Impr	oved	Supe
--	------	--	-------	-------	-------	-------	--------	------	------

	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 ¼-8 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	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 tall- er plant. It adds a new level of dependability and will have strong marketshare for growers.
→ 03100 Glacial 心	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=1,0	000 seeds					
Price per 1,000 seeds (M)	2.5M	10M	25M	100M	500M*					
03249 Diamond Mine Cruiser	13.90	13.15	12.70	12.25	12.15					
04016 Mirage Cruiser	13.20	12.45	12.00	11.55	11.45					
* Multiple packages may be used to fill orders for these quantities										

CORN WHITE SH2 Extra Sweet & Improved Super Sweets									
Price per 1,000 seeds (M)	2.5M	10M	25M	100M	500M*				
03224 Eden RMN ^{Cruiser}	15.75	15.00	14.55	14.10	14.00				
03100 Glacial Cruiser	12.95	12.20	11.75	11.30	11.20				
03243 Leadoff MXR ^{Cruiser} 15.30 14.55 14.10 13.65									
* Multiple packages may be used to fill orders for these quantities.									

2023 SWEET CORN TRIAL REPORT

This year on April 14th, we planted our cold soil trial. We looked at 29 different entries. Most of the entries were two row plots, 20 ft. long. In addition, we trialed four varieties to see how they performed in large block trial settings. I was able to work the ground down in the fall of '22, so I could plant into a stale seed bed. For the middle of April, the field planted nicely. From April 14th to May 5th, we averaged a soil temperature of 53.9 degrees at 2" deep. A few newer varieties we looked at were Kickoff XR, Bolt XR, 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 past year we introduced QuickStart, a 72-day bi-color from Crookham. I think it has a lot of potential, but due to coon damage we were unable to rate its flavor. QuickStart has performed well as an experimental number and we look forward to hearing how it performs for you.

In the Sh2 sweet corn trial, we evaluated 417 varieties. We looked at all of them in our main season trial, but also looked at some of them in different block trials (that included yield) and a late season block planted June 30th. We are still excited about the performance of Solstice, Xanadu, Octane, and Eden RMN. A couple of new ones that stuck out in my notes are Troubadour XR and Matriarch.

This year was the first year that I planted a late sweet corn trial. It was exciting to see how a few of our corns performed and held up in the late season disease pressure. I look forward to performing this trial again to build and establish a tread line to help growers capture that late season sweet corn premium.

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 show a lot of promise and that we are getting excited about. We look forward to taking a look at these hybrids again next summer.

by: Pete Dinius - Product Development Lead

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

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CORN		YELLO	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	М	М	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	М	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	М	М	FM, HG	***	Rust resistant and MDM resistant Incredible.

CORN		YELLO	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 ¼ 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.			
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 ½ 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	20.20	18.95	18.60	18.20	17.90
02007 Gold Nuggets	19.00	17.75	17.40	17.00	16.70
02056 Incredible R/M	20.25	19.00	18.65	18.25	17.95
* Multiple packages may be used to fill ord	ers for thes	e quantiti	es.		

CORN YELLOW Synergistic				M=1,0	000 seeds				
Price per 1,000 seeds (M)	2.5M	10M	25M	100M	500M*				
04045 Cafe Cruiser	14.20	13.45	13.00	12.55	12.45				
04004 Gold Standard Cruiser	13.65	12.90	12.45	12.00	11.90				
04012 Honey Select Cruiser	9.00	8.25	7.80	7.35	7.25				
04008 Inferno Cruiser	12.70	11.95	11.50	11.05	10.95				
* Multiple packages may be used to fill o	* Multiple packages may be used to fill orders for these quantities								









Order
ONLINE

a
ruppseeds.com

HONEY SELECT

TAKEOFF MXR

ICON XR

XTRA TENDER 1572

CORN	YELLO	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 ½ - 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 ^{Cruiser}	15.60	14.85	14.40	13.95	13.85					
03223 Takeoff MXR ^{Cruiser}	15.30	14.55	14.10	13.65	13.55					
03031 Xtra Tender 1572 ^{Cruiser}	15.25	14.50	14.05	13.60	13.50					
* Multiple packages may be used to fill or	* Multiple packages may be used to fill orders for these quantities.									



CORN		ORN	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.								
05510	Seneca Mini Indian	105	A selection of miniature Indian corn with 5 - 6" ears. Attractive for ornamental uses.								

CORN ORNAMENTAL POPCORN									
Priced per package	4 oz.								
Priced per pound in these package sizes		1#	F#	25#	F0#				
in these package sizes		1#	5#	25#	50#				
06010 Firecracker	10.20	27.90	18.60	18.35	18.10				
06006 Little Indian	10.50	28.75	19.15	18.90	18.65				
05510 Seneca Mini Indian	6.20	16.95	11.30	11.05	10.80				

































POPCORN

EATING QUALITY

No popcorn varieties are hulless. 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.













EARTH TONES

FIESTA

INDIAN ART **RED FIRE**

COI	RN		POP	CORN						
Comi	mercial V	▲ ′arieties	Color	Days	Lodging	Yield per Acre	Expansion	Eating Quality	Mushroom	Features
NEW	06041	R400MR ^{F1}	Yellow	103	2%	5000 lbs. +	34	Good		This popcorn has very high yield potential. Grows on a sturdy stalk with high resistance to common rust and Grey Leaf Spot. Intermediate resistance to Goss' Wilt. Vibrant orange kernels pop into mushroom flakes.
	06039	R98114W ^{FI} 心	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} 心	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 $8^{\prime\prime}$ ears and kernels that are variegated and of many colors.						
05101	Indian Art Red Fire F	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 COF	RN			M=1,0	00 seeds
	Priced per package	4 oz.				
	Priced per pound in these package sizes		1#	5#	25#	50#*
05535	American Way	6.85	26.70	17.80	17.55	17.30
05536U	Earth Tones Untreated	7.50	29.25	19.50	19.25	19.00
05507	Fiesta	5.70	22.20	14.80	14.55	14.30
05101	Indian Art Red Fire	8.45	33.00	22.00	21.75	21.50

CORN POPCORN			M=1,0	00 seed
Price per 1,000 seeds (M)	2.5M	10M	25M	100N
Commercial Varieties				
06041 R400MR	8.05	7.55	7.30	7.0
06039 R98114W White	5.75	5.25	5.00	4.7
06040 R997 Yellow	5.75	5.25	5.00	4.75
06027 Ruby Red	11.40	10.90	10.65	10.40
06026 Shaman's Blue	10.40	9.90	9.65	9.40

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





























CUCUMBERS

PLANTING

Direct seed ½" - 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 Cassiicola

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

EXCELSIOR

CITADEL

EUREKA

SUPREMO

CUCUMB	ERS	PROTECTE	D CULTU	RE Parthe	enocarpio		
•		Season	Plant	Length	Color	Disease	Features
23569	Camaro F1	Spring /Autumn	Vigorous	13 - 16"	DG	PM	Fruit exudes excellent color and shape. Has intermediate resistance to powdery mildew.
23576	Corinto F1	Spring /Autumn	Vigorous	8 - 10"	DG	CMV, CVYV, PM	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.
23574	Excelsior F1	Spring /Autumn	Compact / Vigorous	4 - 5 "	DG	Cca, CMV, CVYV, PM	An excellent pickling variety for full-season production. Open, vigorous plant with medium to dark green fruit.
23571	Katrina ^{F1}	Spring /Autumn	Compact / Vigorous	6 "	DG	Ccu, CMV, CVYV, PM	High quality small fruit that are extremely uniform. Early maturing fruit maintains high quality and production levels throughout the harvest season.

CUCUME	ERS	PICK	LING					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	Industry-leading disease package includes intermediate resistance to Downy Mildew. Excellent option for machine harvest due to concentrated fruit set.
23014	Eureka ^{FI}	53	MO	Compact	3.1	W-DG	A, ALS, CMV, PM, PRSV, S, WMV	A monoecious hybrid with unique disease tolerances. Compare with your current favorite.
NEW 23008	Super Max 🙋	40-45	MO	Vigorous	3.1	MG	CMV,PRSV,W- MV,ZYMV,C- ca,Ccu	Thick skin with small seed cavity that is resistant to target leaf spot. High quality fruit ideal for fresh and processing markets.
23003	Supremo FI	43	MO	Vigorous	3	W-DG	A, ALS, CMV, PM, PRSV, S, WMV, ZYMV	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.
23025	Vlasstar FI	52	Р	Vigorous	3	W-MDG	A, ALS, CMV, PM, S	A medium dark, blocky pickle that picks over a sustained multiple harvest.

CUCUMBERS PROTECTED CULTURE								
Priced per packa	ge 100 Seeds							
23569U Camaro Untreated	134.80							
23576 Corinto	41.10							
23574 Excelsior	26.15							
23571 Katrina	41.20							

CUCUMBERS PICKLING				M=1,00	00 seeds
Priced per package	100 Seeds				
Price per 1,000 seeds (M)		1M	5M	15M	75M*
23005 Citadel FI400	3.20	11.95	10.20	9.20	8.45
23014 Eureka FI400	3.80	17.85	16.10	15.10	14.35
23008 Super Max FI400	4.00	19.25	17.50	16.50	15.75
23003 Supremo FI400	4.00	19.25	17.50	16.50	15.75
23025 Vlasstar FI400		10.15	8.40	7.40	6.65
* Multiple packages may be used to fill or	ders for thes	e quantitie	es.		











BRICKYARD

BRISTOL

COBRA

DARLINGTON

RACEWAY

CUC	UMB	ERS	SLIC	ERS					
		*	Days	Habit	Plant	L/D Ratio	Color	Disease	Features
	23502	Brickyard ^{FI}	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 downey mildew resistance.
*	23512	Bristol ^{F1}	54	GY	Moderately Vigorous	8 ¼ x 2 ¼"	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.
	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	S				M=1,00	00 seeds
Priced per package	100 Seeds					
Price per 1,000 seeds (M)		1M	5M	15M	75M*	350M
23502 Brickyard FI400		19.05	17.55	16.55	15.80	14.80
23512 Bristol FI400	5.50	20.00	18.50	17.50	16.75	15.75
23004 Cobra FI400		23.15	21.65	20.65	19.90	18.90

CUCUMBERS SLICERS			M=1,00	00 seeds		
Priced per package	100 Seeds					
Price per 1,000 seeds (M)		1M	5M	15M	75M*	350M
23568 Darlington FI400	7.70	27.85	26.35	25.35	24.60	23.60
23505 Raceway FI400	5.40	19.50	18.00	17.00	16.25	15.25
* Multiple packages may be use	d to fill ord	ers for thes	e quantitie	es.		

GROWER PREFERRED ALL-STARS CUCUMBERS



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.

Searching for just the precise pickling cucumber variety to use in a greenhouse production this season? **Excelsior** may be just the variety you desire. At optimal harvesting length (4 - 5"), Excelsior has a tremendous pack out of high quality fruit. Even for your hard to satisfy patrons, Excelsior is something to be thrilled about.

....

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









FAIRY TALE

GAUDI HAI

NSEL	NAD
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EGGPLAN	NT					
	•	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 ^{FI}	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.

ENDIVE / ESCAROLE	СНІ	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=1,0	000 seeds
Priced per package	500 Seeds				
Price per 1,000 seeds (M)		1M	5M	25M	100M
24505 Epic	7.95	12.70	11.60	11.20	10.65
24526 Fairy Tale	46.25	74.00	72.90	72.50	71.95
24502 Gaudi	20.50	32.75	31.65	31.25	30.70
24525 Hansel	46.25	74.00	72.90	72.50	71.95
24524 Nadia	17.55	28.05	26.95	26.55	26.00
24521 Night Shadow	10.05	16.05	14.95	14.55	14.00
24516 Santana	13.00	20.75	19.65	19.25	18.70

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

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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 ½ 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 ½ 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 ½ 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.

FarMore°FI400
Cucurbits

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 gourd 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.

7	LIDEC		A DIA	SICERARIA
61	URDS	$I \Delta (I + I \times I)$	ARIA	SIL ERARIA

COURDS LA COLLAN COLLA		,				
Priced per package	1 oz.	4 oz.				
Priced per pound in these package sizes			1#	5#	25#	Seeds /lb.
26034 Birdhouse Martinhouse	10.50	24.70	70.05	69.05	68.05	3,500
26034U Birdhouse Martinhouse Untreated	10.50	24.70	70.05	69.05	68.05	3,500
26002U Bushel Untreated**	14.35	33.65	95.45	94.45	93.45	1,800
26035 Extra Long Handled Dipper	10.95	25.65	72.70	71.70	70.70	4,500
26033 Large Speckled Apple	12.15	28.50	80.85	79.85	78.85	2,400
26025 Miniature Bottle	11.90	27.95	79.20	78.20	77.20	5,000
26004 Mixed Large Types	12.50	29.40	83.35	82.35	81.35	2,400
26027 Speckled Swan	10.95	25.65	72.70	71.70	70.70	2,200
** 15 seeds for \$5.00						

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GALAXY OF STARS

LUNCH LADY

RUPP FANCY WARTED RUPP SMALL FORMULA BLEND

GO	URDS		PEPO	
		•	Days	Features
	26042	Galaxy of Stars FI	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.
1	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 Warted 🎷 🏷	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 Warted and Small Spoon. Very limited supply - call for availability.

GOURDS PEPO Priced per package	250 Seeds				M=1,00	00 seeds
Price per 1,000 seeds (M)		1M	5M	25M	55M	Seeds /lb.
Autumn Wings 26501 Large Swan	10.15	28.90	27.90	26.90	25.90	7,300
Autumn Wings 26501 Large Swan R400	12.45	35.50	34.50	33.50	32.50	7,300
Autumn Wings 26501U Large Swan Untreated	10.15	28.90	27.90	26.90	25.90	7,300
Autumn Wings 26502 Medium	10.15	28.90	27.90	26.90	25.90	8,000
Autumn Wings 26502 Medium F1400	12.45	35.50	34.50	33.50	32.50	8,000
Autumn Wings 26502U Medium Untreated	10.15	28.90	27.90	26.90	25.90	8,000
Autumn Wings 26503 Small	10.15	28.90	27.90	26.90	25.90	7,800
Autumn Wings 26503 Small Fl400	12.45	35.50	34.50	33.50	32.50	7,800
Autumn Wings 26503U Small Untreated	10.15	28.90	27.90	26.90	25.90	7,800
Autumn Wings 26510 Blend	10.15	28.90	27.90	26.90	25.90	8,000
Autumn Wings 26510 Blend FI400	12.45	35.50	34.50	33.50	32.50	8,000
26042 Galaxy of Stars	33.10	94.45	93.45	92.45	91.45	10,000
26042 Galaxy of Stars FI400	35.40	101.05	100.05	99.05	98.05	10,000
26042U Galaxy of Stars Untreated	33.10	94.45	93.45	92.45	91.45	10,000

GOL	JRDS PEPO					M=1,0	00 seeds
	Priced per package	250 Seeds					
Pı	rice per 1,000 seeds (M)		1M	5M	25M	55M	Seeds /lb.
26009	Gizmo FI400	41.55	118.70	117.70	116.70	115.70	6,600
26012	Hoargarth FI400	40.20	114.75	113.75	112.75	111.75	3,500
26026	Rupp Fancy Warted	5.15	14.65	13.65	12.65	11.65	9,400
26026	Rupp Fancy Warted	7.45	21.25	20.25	19.25	18.25	9,400
26026U	Rupp Fancy Warted Untreated	5.15	14.65	13.65	12.65	11.65	9,400
26005	Rupp Small Formula Blend	4.00	11.35	10.35	9.35	8.35	9,300
26005	Rupp Small Formula Blend FI400	6.30	18.00	17.00	16.00	15.00	9,300

GOURDS PEPO					M=1,0	00 seeds
Priced per package	1 oz.	4 oz.				
Priced per pound in these package sizes			1#	5#	25#	Seeds /lb.
26043 Lunch Lady	22.30	52.45	153.00	150.00	147.00	3,300













EMILY

EVERLEAF EMERALD TOWERS

EVERLEAF GENOVESE

GENOVESER

STARO

IERB:	S			Pricing on page 5
asil		_	Annual / Perennial	Features
VEW	7041	Aya	А	New generation of downy mildew protected basil. This semi-compact unique and elegant plant can be used for container and field production. Its leaves are dark, shiny, and flat-spoon shaped. Expect a massive stem and a highly productive plant. Maturity is about 40-55 days from sowing.
27	7035	Emily	А	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.
27	7019	Everleaf Emerald Towers	А	This proved to be the best basil in our trials. 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.
27	7006	Everleaf Genovese	А	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 downey mildew and resistant to Fusarium.
27	7033	Genoveser	А	A special, high yielding strain, dark green, cup shaped selection, glossy leaf, recommended for field production.
27	7012	Italian Large Leaf	А	Leaves are broad, oval and crinkly with spicy flavor. Used in perfumes, Italian seasonings, and soups.
27	7017	Lemon	А	Pleasing citrus aroma, excellent in vinegars or with fish.
27	7030	Siam Queen	А	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.
atnip				
	7509	Catnip	Р	A vigorous growing mint loved by cats. Grayish green leaves have a strong mint-like flavor.
hervil 27	7005	Chervil	A	The fine cut, deep green leaves look like a delicate, lacy version of parsley. Flavor is a mild anise/parsley and goes we with fish, seafood, eggs or in salads. At its best fresh from the garden.
hives				
27	7514	Staro	Р	Extra thick, dark green leaved variety for all growing purposes. Excellent for forcing and pot growing as well as field production.
oriande	er / C	ilantro		
27	7002	Calypso	А	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.
ill				
27	7007	Bouquet	А	A development from Mammoth Dill. Used in pickles and salad dressings. Adds zest to salads, soups, and vegetables.
27	7516	Green Sleeves	А	A very stable, fast growing, medium fine leafed variety of dark green dill for production of fresh bundles. Strong bolt resistance. $2 - 2 \frac{1}{2}$ feet tall.

 $\label{eq:Additional} \mbox{ Additional Herbs can be found on the next page} \ --> \ .$



































GREEN SLEEVES



OREGANO VULGARE



GIGANTE D'ITALIA



SAGE

THE RESERVE AND ADDRESS OF THE PARTY OF THE		1000
	SUMMER	SAVORY

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HERBS			Pricing on page 55
	*	Annual / Perennial	Features
Lavender			
27502	Lavender Vera	Р	Great for dried flowers, perfuming linens, and repelling moths. Hardy.
Oregano			
27503	Oregano Vulgare	P	Purple flowered. Seasons tomato sauces, fish, salad dressings and pizza.
Parsley additi	onal Parsley on page 6	7	
35012	Gigante d'Italia	Α	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	Р	Leaves are used in seasoning meats, sauces, and wonderful for potpourri.
Sage			
27506	Sage	P	Most widely used herb. Seasons poultry, sausage, etc.
Summer Savo	ry		
27011	Summer Savory	Α	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	PROFES	SIONA	4L		M=1,00	0 seeds
Price per package/pot	1/4 und oz	1 oz.	4 oz.	1#	5#	25#
27041U Aya Untreated	7.55	24.15	70.90	188.95	187.95	
Italian Large Leaf 27012U ^{Untreated}	2.75	3.90	11.40	30.35	29.35	28.35
27017U Lemon Untreated	4.10	13.00	38.20	101.80	100.80	
27030U Siam Queen Thai Untrea	7.30	23.35	68.65	182.95	181.95	
Catnip						
27509U Catnip Untreated	2.35	7.40	21.70	57.75		
Chervil						
27005U Chervil Untreated		3.50	9.85	26.20	25.20	
Coriander / Cilantro						
27002U Calypso Untreated		3.00	4.20	11.05	10.05	9.05
Dill						
27007U Bouquet Untreated		3.50	7.00	18.65	17.65	16.65
Lavender						
27502U Lavender Vera Untreated	7.65	24.45	71.85	191.60	190.60	
Oregano						
27503U Oregano Vulgare Untreated	7.05	22.45	66.00	176.00	175.00	
Parsley						
35012 Gigante d'Italia		5.55	7.60	21.70	20.70	19.70
Peppermint						
27504U Peppermint Untreated	30.00	95.90	281.95	751.75	750.75	
Rosemary						
27505U Rosemary Untreated	31.45	100.55	295.70	788.50	787.50	
Sage						
27506U Sage Untreated		12.90	37.55	100.10	99.10	
Summer Savory						
27011U Summer Savory Unt	eated	4.40	12.55	33.45	32.45	

HER	BS FOR THE PROFESSIONAL			M=1,00	0 seeds
	Price per 1,000 seeds (M)	1M	5M	25M	100M
Basil					
27035	Emily	3.65	2.15	0.90	0.40
27019	Everleaf Emerald Towers	22.95	21.45	20.20	19.70
27006	Everleaf Genovese	22.95	21.45	20.20	19.70
27033	Genoveser	3.60	2.10	0.85	0.35
Chives					
27514	Staro	3.65	2.15	0.90	0.40
Dill					
27516	Green Sleeves	3.50	2.00	0.75	0.25
Thyme					
27508U	German Winter Untreated	3.55	2.05	0.80	0.30



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BLACK MAGIC

BLUE RIDGE

KOLIBRI

QUICKSTAR

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.
Heritage Vari	eties		
28004	Red Russian	24 - 36"	The most tender, mild flavored kale variety. Will wilt soon after harvest; should be cooled or consumed promptly.

KOHLRAE	3I		
	_	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=1,0	000 seeds
	Price per 1,000 seeds (M)	1M	5M	25M	100M
28005 Bla	ck Magic	3.90	2.85	2.10	1.60
28504 Blu	e Ridge	10.65	9.60	8.85	8.35
	Priced per package	4 oz.			
	Priced per pound in these package sizes		1#	5#	25#
28004U Rec	d Russian ^{Untreated}	15.25	33.85	33.35	33.10

KOHLRABI M=1,000 se					
Price per 1,000 seeds (M)	1M	5M	25M	100M	
29002 Kolibri	20.95	20.40	19.90	19.40	
29004 Quickstar	9.70	9.15	8.65	8.15	



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www.facebook.com/ruppseedsinc/



TADORNA

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.

LEEK				M=1,	000 seeds
	Price per 1,000 seeds (M)	1M	10M	100M	500M*
30908P Tac	dorna ^{Pelleted}	6.90	6.65	6.45	6.30
* M	ultiple packages may be used to fill or	ders for these o	quantities.		

































LETTUCE

PLANTING

Raw Seed Lettuce: Prep the ground so the soil is as fine and loose as possible. Make a seed trench with tines on garden rake. Lightly sprinkle seed in every other trench. Seed should be roughly 1/8"- ¼" deep. Lightly cover the seed with fine soil.

Pelleted Lettuce: Seed in trays 3-4 weeks prior to transplanting. Direct seed into field planting at a depth of 1/8 inch. Seed or transplant lettuce at 10-12" apart in row and 10-12" between rows.

Optimal germination is 50-72 degrees and should sprout in 7-10 days. Lettuce seed will go dormant if soil temperature does get too high.

MANAGEMENT

Growing on white plastic mulch is highly recommended to help keep weeds under control. Leaf head lettuce, Butterhead, and Romaine are the easiest types to grow and sell for fresh markets or roadside stands. Typically, growers cut lettuce in the cool of the morning or evening prior to market day. Cut at the base of the plant and cool at 40 degrees in a high humidity environment. If lettuce wilts, place stems in fresh water in the refrigerator.

HARVEST

Lettuce is an easy crop to add to an early farmers market or fall market. Lettuce can be easily sold alongside many other crops such as beets, radishes, Pak-Choi, Carrots, Spinach. Another trick of the trade is selling a mix of lettuce that is unique to your market or stand. Growers can add different colored lettuce and leaf types or even mustards, or other micro greens to spice up their signature mix. We see growers typically trying to do 2:1 ratio of green to red lettuce.

STORAGE

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









ORDERS OVER \$350 ARE SHIPPED FREE!

ALKINDUS

BARILLA

MERIDIAN

SOMERSET











BERGAM'S GREEN

NEW RED FIRE

RED MIST

TETON

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 tip- burn 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.
30215	Teton Green	Taller and darker plant for spring and fall harvest. Early maturing and produces large and heavy heads.
Romaine Hea	rt	
30203	Arroyo Green	A commercial introduction suitable for carton, fresh market and heart production. Shiny dark green. Broad seasonal adaptability.

LETTUCE		M=	1,000 seeds
Price per 1,000 seeds (M)	5M	100M	500M
Butterhead			
30309P Alkindus Primed/Pelleted	6.90	6.55	6.30
30504P Barilla Pelleted	4.40	4.05	3.80
Iceberg			
30705P Meridian Pelleted	3.50	3.15	2.90
30704P Somerset Pelleted	3.30	2.95	2.70

LETTUCE		M=	1,000 seeds
Price per 1,000 seeds (M)	5M	100M	500M
30304P Bergam's Green Primed/Pelleted	2.80	2.45	2.20
30016P New Red Fire Pelleted	2.65	2.30	2.05
30016 New Red Fire	1.50	1.15	0.90
30013P Red Mist Pelleted	3.10	2.75	2.50
Romaine			
30214P Breen Pelleted	6.35	6.00	5.75
30215P Teton Primed/Pelleted	3.10	2.75	2.50
Romaine Heart			
30203P Arroyo Pelleted	3.30	2.95	2.70































MELONS

PLANTING

When direct seeding plant ½" - 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

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 ¾ to full slip. Wash fruit in peroxyacetic acid (peroxide and acetic acid), as a non-chlorine sanitizing option.

STORAGE

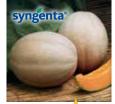
Cool to at least 70°F and at 95% humidity. Shelf life is based on storage temperature. Do not cool below 32°F.

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

AVATAR

CLEOPATRA

SUGAR RUSH

MELONS		CAN	TALOU	PE 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.
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 b	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 melon All-Stars continue to be our top performing varieties for growers. You can't go wrong with adding these to your farm.

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

DAMARIS

THUNDERSTRUCK

TIRRENO

AMBASSADOR

SUGAR CUBE

MELONS		CAI	VTALOL	JPE Hybrid E	xtended	/Long Sh	elf Life	Pricing on page 62
	•	Days	Fruit Size	Net / Sutures	Flesh Color	Disease	Harvest Indicator	Features
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 b	78 - 80	5 - 6	Medium Net / No Sutures	Orange	F ^{0.} ² ,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.
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.
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 CANTALO	UPE н	ybrid			M=1,0	00 seeds
Priced per package	100 Seeds	500 Seeds				
Price per 1,000 seeds (M)			1M	5M	15M*	90M*
31015 Accolade F300	19.60	77.00	110.00	106.90	104.90	103.90
31017 Afterglow	13.60	53.45	76.30	73.20	71.20	70.20
31071 Aphrodite F300	18.00	70.80	101.10	98.00	96.00	95.00
31022 Arangina	13.45	52.80	75.40	72.30	70.30	69.30
31050 Athena F300	18.20	71.65	102.35	99.25	97.25	96.25
31084 Avatar F300	13.15	51.70	73.85	70.75	68.75	67.75
31014 Cleopatra	13.60	53.40	76.25	73.15	71.15	70.15
31020 Damaris F300	18.55	72.85	104.05	100.95	98.95	97.95
31075 Goddess	15.00	58.95	84.15	81.05	79.05	78.05

MELONS CANTALO			M=1,0	000 seeds		
Priced per package	100 Seeds	500 Seeds				
Price per 1,000 seeds (M)			1M	5M	15M*	90M*
31009 Shockwave	16.20	63.70	91.00	87.90	85.90	84.90
31085 Solstice	13.70	53.80	76.80	73.70	71.70	70.70
31018 Sugar Rush	15.40	60.45	86.35	83.25	81.25	80.25
31021 Thunderstruck	15.40	60.45	86.35	83.25	81.25	80.25
31083 Tirreno	23.60	92.90	132.65	129.55	127.55	126.55
* Multiple packages may be u	sed to fill o	orders for t	hese quanti	ties.		

MELONS		MIX	ED/SPE	CIALTY Hy	brid		
	_	Days	Fruit Size pounds	Net / Sutures	Flesh Color	Disease	Features
31704	Ambassador	76	6 - 8	Heavy Net / Slight Sutures	lvory / 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	PERS	ONAL S	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		•	
4	•	Days	Features
Fresh Market			
32005 S	Savannah F1 Mustard Spinach	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.
33009 J	Jambalaya 2.0 🏻	50	Compact plant with small leaves. High yields with uniform fruit. Very early.

MELONS MIXED/SPEC	CIALTY		M=1,0	00 seeds		
Priced per package	100 500 package Seeds Seeds					
Price per 1,000 seeds (M)			1M	5M	15M*	
31704 Ambassador	13.55	53.65	76.60	73.50	71.50	
31011 Earli-Dew F300	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	d to fill orders	for these qua	ntities.			

MUSTARD					
	Priced per package	4 oz.			
	Priced per pound in these package sizes		1#	5#	50#
32005 Savannah		69.65	123.80	122.80	121.80

MELONS PERSONAL S	orid		M=1,0	00 seeds	
Priced per package					
Price per 1,000 seeds (M)			1M	5M	15M*
1					
31078 Sugar Cube	15.10	59.75	85.35	82.25	80.25

OKRA				
Priced per package	1 oz.	4 oz.		
Priced per pound in these package sizes			1#	5#
33003U Dwarf Long Green Pod Untreated		6.65	10.20	9.95
33009 Jambalaya 2.0	19.95	59.00	185.80	184.80





















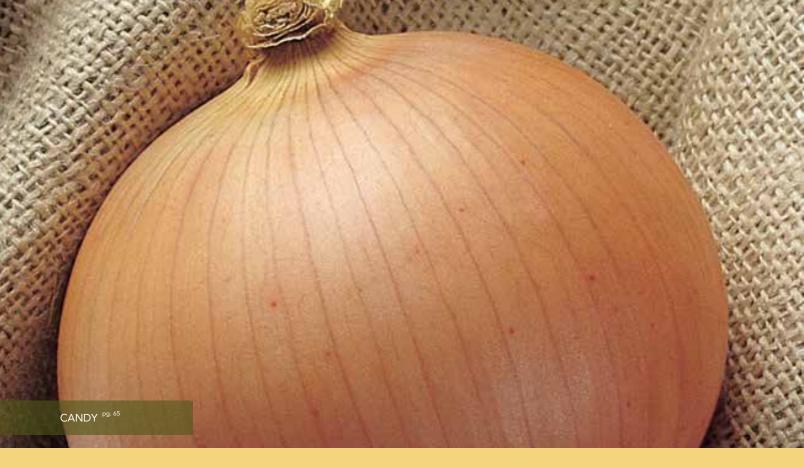












ONIONS

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 1/4" deep and approximately 1/2" 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 undercutter 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 hoophouse 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



RED DEFENDER



SV4643NT



BUNCHING



ISHIKURA IMPROVED **RED BUNCHING**

ONIONS						Pricing on page 66
Bulb Onions /	▲ Intermediate Day	Maturity	Color	Bulb Shape	Storage	Features
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 FI	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					
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 Oni	ons					
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.







S	November	7%
	December	5%
	January	5%
	February 4	1%
	March	3%
	Δpril	2%

BROOM CO	ORN
SORGHUM	BLEND

ORNAMENTAL	SOR	RGHUM / BROOMCORN			
•	Days	Features			
05538 Broom Corn Sorghum Blend	100- 110	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.			

ONIONS	Description	s on page 65.	M=1,000 seeds
Price per 1,000 seeds (M)	5M	25M	100M
34020 Candy F300	5.30	4.40	3.25
34020P Candy F300 Pelleted	5.95	4.95	3.65
34004 Great Western	6.45	5.35	3.95
34021P Great White F300 Pelleted	9.00	7.50	5.55
34036 Red Bunching DPS 3047	8.00	6.65	4.90
34016P Red Canyon F300 Pelleted	9.00	7.50	5.55
34045 Red Defender	5.50	4.55	3.35
34039P Spanish Medallion Pelleted	7.35	6.10	4.50
34000 SV4643NT F300	6.90	5.75	4.25
Priced per package	1 oz.	4 oz.	1#
34510 Ishikura Improved Bunching	6.55	17.35	43.30

ORNAMENTAL SORGHUM / BRO)RN		
Priced per package	4 oz.		
Priced per pound in these package sizes		1#	5#
05538U Broom Corn Sorghum Blend Untreated	17.80	51.10	48.20











W



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.









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

PAR	RSNIPS	;		
		•	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.
NEW	36007	Sabre F1	150	A main season, high yielding parsnip with a smooth white skin. Good resistance to canker. It has an improved slender shape and holds it weight nicely down the root. Also, works well for storage and can hold its white color.

PARSLEY					
Priced per package	1 oz.	4 oz.			
Priced per pound in these package sizes			1#	5#	25#
35012 Gigante d'Italia	5.55	7.60	21.70	20.70	19.70

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
36007P Sabre Primed, Pelleted	5.85	5.30	5.05	4.70





















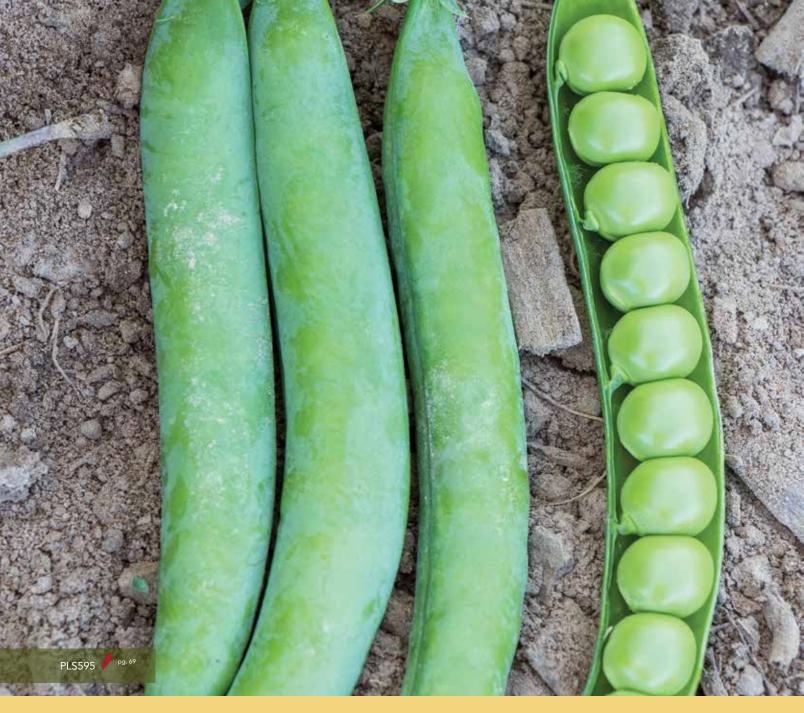












PEAS

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

PE/	\S							
		•	Days	Height	Pod Length	Peas per Pod	Disease	Features
Fresh	n Market							
	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	Heavy crops, very disease resistant.
NEW	12005	PLS 566	64	22-24"	3.7"	10-12	F, PM,	Long, light green pods stand out against the dark green afila vine. Two pods per node and high yields. Shows tolerance to downy mildew. Great companion to PLS 595.
110	12008	PLS 595	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	Sabre is a normal vine type with long pods. The dark green berries produce wonderful yields - frozen, canned or fresh.
NEW	12519	Short Story PLS 534	58	20-22"	3.8"	9-10	F 1 & 2, RR	Second early afila with double pods. Creates fantastic yields. Great companion to PLS 595.

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

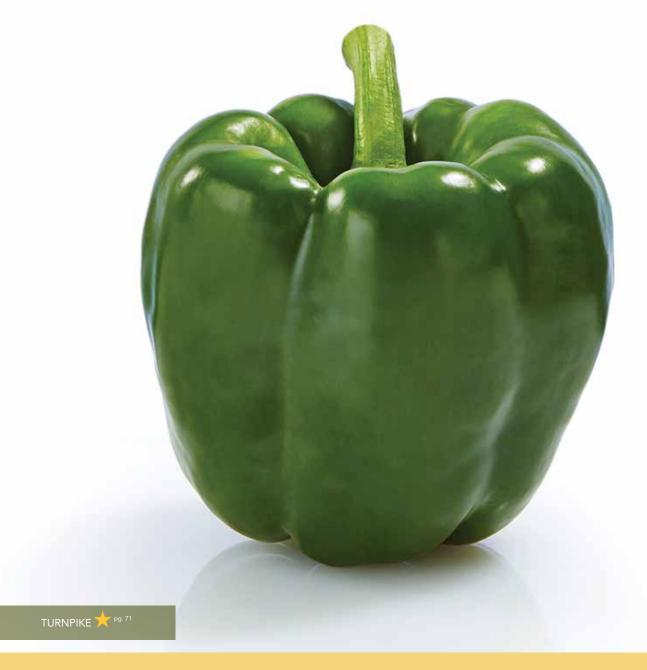
PEAS		SUGAR SNAP		
•		Days	Features	
12206	Cascadia	67	A snap pea with unusually thick pod walls on a 30" vine. Pods remain tender and sweeter longer than other cultivars. Flavor improves until seeds are over mature. Has outstanding disease tolerance, eating quality and yielding ability.	
12201	Sugar 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 Leg a	асу	7.20	4.75	4.50	4.25	4.15
12003 Mae	stro	8.50	5.60	5.35	5.10	5.00
12005 PLS	566	7.20	4.75	4.50	4.25	4.15
12008 PLS!	595	7.20	4.75	4.50	4.25	4.15
12035 Sab i	re	7.20	4.75	4.50	4.25	4.15
12519 Sho	rt Story PLS 534	7.20	4.75	4.50	4.25	4.15
* Mul	tiple packages may be used	to fill orders f	or these qua	ntities.		

Priced per pound in these package sizes	1#	5#	25#	50#*	500#*
12033 Legacy	7.20	4.75	4.50	4.25	4.15
12003 Maestro	8.50	5.60	5.35	5.10	5.00
12005 PLS 566	7.20	4.75	4.50	4.25	4.15
12008 PLS595	7.20	4.75	4.50	4.25	4.15
12035 Sabre	7.20	4.75	4.50	4.25	4.15
12519 Short Story PLS 534	7.20	4.75	4.50	4.25	4.15

PEAS SNOW PEA					
Priced per pound in these package sizes	1#	5#	25#	50#*	500#*
12102 Oregon Sugar Pod II	8.35	5.50	5.25	5.00	4.90
* Multiple packages may be used to fill	orders for th	nese quantit	ties.		

PEAS SUGAR SNAP					
Priced per pound in these package sizes	1#	5#	25#	50#*	500#*
12206 Cascadia	8.10	5.35	5.10	4.85	4.75
12201 Sugar Ann	7.55	5.00	4.75	4.50	4.40
Price per 1,000 seeds (M)	2M	10M	20M	80M	800M
12209 Sugar Sprint	3.90	2.90	2.65	2.45	2.20
* Multiple packages may be used t	to fill orders	for these qua	ntities.		



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 - Phytopthora 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











MERCER

PS09941819 X5R®

RED KNIGHT X3R®

REDFISH X10R®











REGULATOR

SAILFISH X10R®

SPRINTER

TARPON X10R®

An early red bell pepper for fresh market, with high-quality, blocky smooth

Produces quality yields of uniform fruit over a long harvest window. Com-

pact plants. It sets fruit well under row cover. Strong against blossom-end

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

Extra large sized fruit with massively thick walls. Provides industry lead-

PEPPERS		BELL	GREEN	N TO F	RED Hybrid		Pricing on page 72
	•	Days	Flesh		Disease	Use	Features
37125	Aristotle X3R*	72	Thick	Ó	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.
37065	Mercer b	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 XSR*	75	Thick	Ú	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	Ć	BLS ^{1,2,3} , PVY	Р	A Seminis medium to large blocky hybrid. Early to red, like North Star, with resistance to BLS races 1, 2 and 3.
37048	Redfish X10R®	76	Thick	Ú	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	Ú	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.

FM, P

FM, PP

FM, PP

FM

fruit, and excellent red color.

rot and russetting. Turns red early.

dark green, smooth blocky fruits.

ing potential for yield.

BLS⁰⁻¹⁰, PHY,

TMV

TMV⁰⁻³

 TMV

BLS⁰⁻¹⁰, PHY,

BLS^{1,2,3,4,5,7,9},

PHY, TMV

M
0
P
R





37046

Sailfish X10R®

37014 Sprinter 🗆

37042 Tarpon X10R*

37023 Turnpike XSR®

Early

Early

Main

72

Thick

Thick

Thick

Thick

Medium













ABAY

DICAPRIO	SVPB8415	X10

DELIRIO

O MILENA VALAHIA

PEPPERS	;	BELL YE	ELLOW	Hybrid			
	•	Days	Flesh		Disease	Use	Features
37015	Abay 🐼	80	Medium Thick	Ó	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	Ó	TMV ⁰⁻³ , TSW	FM	Good variety for high tunnels or unheated greenhouses from Enza Zaden.
37108	Early Sunsation X3R®	70	Thick	Ó	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	Ć	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 GRE		M=1,0	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	78.60	112.25	103.90	98.95	95.10
37125P Aristotle X3R® F300 Pelleted	18.05	79.65	113.75	105.30	100.25	96.35
37065 Mercer F300	17.95	79.30	113.25	104.85	99.85	96.00
PS 09941819 37161 XSR* F300	18.85	83.40	119.10	110.25	105.00	100.95
PS 09941819 X5R® 37161P F300 Pelleted	19.10	84.45	120.60	111.65	106.30	102.20
37119 Red Knight X3R®	14.15	62.45	89.20	82.55	78.60	75.55
37048 Redfish	18.30	80.95	115.60	107.00	101.90	97.95
37047 Regulator with X10R®	19.55	86.40	123.40	114.25	108.80	104.60
37046 Sailfish with X10R®	19.55	86.45	123.50	114.35	108.90	104.70
37014 Sprinter	63.20	279.45	399.20	369.60	352.00	338.45
37042 Tarpon with X10R F300	19.85	87.75	125.35	116.05	110.50	106.25
37042P Tarpon X10R® F300 Pelleted	20.10	88.80	126.80	117.40	111.80	107.50
37023 Turnpike XSR®	19.65	86.80	124.00	114.80	109.30	105.05
* Multiple packages may b	e used to f	ill orders for	these quar	itities.		

			ı			
PEPPERS BELL YEL	LOW i	Hybrid			M=1,0	000 seeds
Priced per package	100 Seeds	500 Seeds				
Price per 1,000 seeds (M)			1M	5M	25M	50M
37015 Abay	18.85	83.25	118.90	110.05	104.80	100.75
37034 Dicaprio	87.95	389.00	555.65	514.45	489.95	471.10
37108 Early Sunsation X3R®	13.90	61.30	87.55	81.05	77.15	74.15
37045 SVPB8415 X10R*	20.95	92.55	132.20	122.40	116.55	112.05
* Multiple packages may be	used to fill	orders for th	ese quantit	ies.		

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 Phytopthora 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 Phytophora. 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































PEI	PPERS		BELL	OTHER	COLO	RS Hybrid		
		•	Days	Flesh		Disease	Use	Features
	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	Ú	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	Ó	TMV ⁰	FM	Larger and better quality than its other lilac competitors. Matures from lilac to a medium red color. 3 - 4 lobe.
NEW	37550	Valahia	Early			TM ⁰⁻²	FM	Valahia is a vigorous plant. It is an early hybrid with indeterminate growth, high yields and constant binding, and a well developed root system.

PEPPERS BELL OT	d	M=1,0	000 seeds			
Priced per package	100 Seeds	500 Seeds				
Price per 1,000 seeds (M)			1M	5M	25M	50M
37090 Delirio	20.15	89.10	127.25	117.80	112.15	107.80
37013 Milena	63.05	278.80	398.25	368.75	351.15	337.60
37088 Tequila	23.35	103.10	147.25	136.30	129.80	124.80
37550 Valahia	10.85	47.80	68.25	63.15	60.10	57.75
6 8 8 10 1 1 1 1	1. 60					

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













CORNITO ARANCIA

CORNITO GIALLO

CORNITO ROSSO

ORANOS

SWEETIE ORANGE

SWEETIE YELLOW

PEPPERS		MISCEI	LANEC	OUS SV	/ЕЕТ Ну	brid 🐠	
	_	Days	Flesh	Color	Shape	Disease	Features
Super Sweet	Cones						
37199	Cornito Arancia	80		Orange	1½ 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 ^o	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 Sw	eet Cones - Snack Peppers	5 1					
37190	Sweetie Orange	70 from transplant	Thick	Orange	2 ½ - 3" long		
37194	Sweetie Purple	70 from transplant	Thick	Purple	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
37191	Sweetie Red	70 from transplant	Thick	Red	2 ½ - 3" long		open field and protected culture.
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 MISCELL	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	21.60	95.45	136.30	126.20	120.15	115.50
37195 Cornito Giallo	14.55	64.20	91.65	84.85	80.80	77.65
37198 Cornito Rosso	14.55	64.20	91.65	84.85	80.80	77.65
37179 Conical Blend	30.55					
37174 Oranos	41.60	183.90	262.65	243.15	231.55	222.60

PEPPERS MISCELL	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	30.85	136.35	194.75	180.30	171.70	165.05
37194 Sweetie Purple	33.65	148.75	212.45	196.70	187.30	180.05
37191 Sweetie Red	30.85	136.35	194.75	180.30	171.70	165.05
37192 Sweetie Yellow	30.85	136.35	194.75	180.30	171.70	165.05
Sweetie Blend 37193 Orange, Purple, Red, Yellow	37.45					
* Multiple medicage accuration						

^{*} 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.



PEPPERS		MISC	ELLAN	EOUS Hybi	rid	
	•	Days	Flesh	Color	Disease	Features
Banana						
NEW 37802	Godiva	70	Thick	Yellow	TSW	Medium vigorous plant with uniform fruits. Fresh and processing harvests with heavy concentrated sets.
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 MISCELL	ANEOU	IS Hybri	d		M=1,00	00 seeds
Priced per packaş	100 e Seeds	500 Seeds				
Price per 1,000 seeds (M			1M	5M	25M	50M
Banana						
37802 Godiva	11.70	51.65	73.75	68.25	65.00	62.50
37038 Lola	13.15	58.00	82.80	76.65	73.00	70.15
37082 SV3782PP X3R*	13.50	59.65	85.20	78.85	75.05	72.15
* Multiple packages may b	e used to fill or	ders for thes	e quantitie	S.		





















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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-Jamacian) 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.





Wax



SPITFIRE





1,000-1,500

500-1,000

100-500

Mild



CHARGER

6

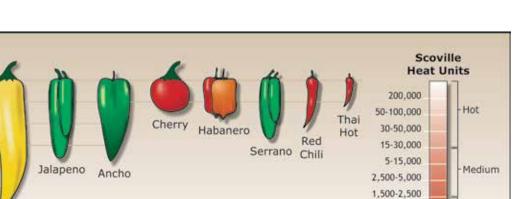
Cayenne

Rupp Seeds Inc.

Pasilla

Long

Green



EPPERS		НОТ	Hybrid					Pricing on pages 79
naheim	•	Days	Flesh	Color	Relative Scoville Rating	Disease	Use	Features
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.
37546	Lambo	75	Thick	Medium Green to Red	1,000 to 2,000	TSW	FM	A medium-large plant that has large leaves providing excellent cover for the high yields it produces. The fruit are a tapered traditional shape, green to red in color and thick walls.
37462	Spitfire			Green to Red	90 to 130	PHY	FM	Only known Anaheim hybrid with phytopthora resistance. Large fruit size.
ncho								
37457	Sargento	80-85	Thick	Glossy Dark Green to Red	350 to 1,750	РНҮ	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 b	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.
ayenne								
37458	Arapaho Cheyenne	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

REY AKUL NEW

BLAZING BANANA















PEP	PERS		НОТ	Hybrid					Pricing on pages 79
Hot C	Cherry	•	Days	Flesh	Color	Relative Scoville Rating	Disease	Use	Features
	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.
Haba	nero								
NEW	37495	Rey Akul	115- 120	Thin	Orange	300,000		FM	This is a highly vigorous habanero that produces an excellent yield of extra-large, bright orange, triangular fruit. Rey Akul is suitable for open- field and mesh growing habitats.
Hot V	Vax								
	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 \times 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.
Jalap	eño								
	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.







TALON





SV8066HJ X3R®

TRICKSTER

TZOTZIL

PEPPERS		НОТ	Hybrid					Pricing on pages 79
Jalapeño con	▲	Days	Flesh	Color	Relative Scoville Rating	Disease	Use	Features
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.
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	Phytopthora 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 Hybri	d				M=1,0	00 seeds
Priced per package	100 Seeds	500 Seeds				
Price per 1,000 seeds (M)			1M	5M	25M	50M
Anaheim						
37412 Charger	16.50	72.90	104.10	96.35	91.75	88.20
37546 Lambo	16.50	72.90	104.10	96.35	91.75	88.20
37462 Spitfire	12.25	54.15	77.30	71.55	68.10	65.45
Ancho						
37457 Sargento	12.15	53.55	76.50	70.80	67.40	64.80
37455 Tiburon F300	8.40	37.10	53.00	49.05	46.70	44.90
Cayenne						
37458 Arapaho Cheyenne	12.00	52.90	75.55	69.95	66.60	64.00
Hot Cherry						
37467 Bombita	16.10	71.15	101.60	94.05	89.55	86.10
37417 Time Bomb	14.95	66.00	94.25	87.25	83.05	79.85
Habanero						
37495 Rey Akul	13.55	59.85	85.50	79.15	75.35	72.45

PEPPERS HOT Hybri	d				M=1,0	00 seeds
Priced per package	100 Seeds	500 Seeds				
Price per 1,000 seeds (M)			1M	5M	25M	50M
Hot Wax						
37422 Blazing Banana	12.95	57.30	81.85	75.75	72.10	69.30
37408 Inferno	11.45	50.55	72.20	66.85	63.65	61.20
Jalapeño						
37476 Jedi	12.90	56.90	81.25	75.20	71.60	68.80
37448 Mammoth	12.90	56.90	81.25	75.20	71.60	68.80
37410 SV3198HJ X3R®	12.40	54.70	78.10	72.30	68.85	66.20
37419 SV8066HJ X3R*	14.00	61.85	88.30	81.75	77.85	74.85
37451 Talon	12.90	56.90	81.25	75.20	71.60	68.80
37479 Trickster	11.90	52.55	75.05	69.45	66.10	63.55
37430 Tzotzil F300	12.35	54.60	78.00	72.20	68.75	66.10

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ORDERS OVER \$350 ARE SHIPPED FREE!

CRACKLE

POTOSI

TAKARA

PEPPERS	НОТ	Hybrid						
▲ Miscellaneous Hot		Days	Flesh	Color	Relative Scoville Rating	Disease	Use	Features
Wilderia in Coas	71101							"Finger Hot" type with length of 4 - 5 inches.
37421	Crackle	65	Thin	Green to Red	1,500 to 3,000		FM	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 Hybri	id				M=1,0	00 seeds
Priced per package	100 Seeds	500 Seeds				
Price per 1,000 seeds (M)			1M	5M	25M	50M
Miscellaneous Hot						
37421 Crackle	9.85	43.40	61.95	57.35	54.60	52.50
37465 Potosi	10.25	45.30	64.65	59.85	57.00	54.80
37420 Takara	13.00	57.40	82.00	75.90	72.25	69.45
* Multiple packages may be	used to fill o	orders for th	ese quantit	ies.		



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%

PEPPER	RS	НОТ	OP Herita	age Varieties				
	*	Days	Flesh	Color	Class Type	Relative Scoville Rating	Use	Features
3750	02 Cayenne Long Slim	72	Thin	Green to Red	Cayenne	30,000 to 50,000	Р	Very productive, pungent, home garden variety.
3750	01 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 $\frac{1}{2}$ - 2" diameter fruit.
3751	12 Red Cherry Large	75	Medium Thick	Medium Green to Red	Cherry	3,500	FM, P	Processing, home garden, and pickling.

PEPPERS HOT OP Heritage Variet	PEPPERS HOT OP Heritage Varieties M=1,000 seed					
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	8.60	12.50	39.00	113.00		

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	Planting Date: May 1	Planting Date: May 15	Planting Date: June 1	Planting Date: June 15	Planting Date: July 1
Maturity	Harvest Range	Harvest Range	Harvest Range	Harvest Range	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.

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







GROW YOUR BEST PUMPKINS YET!

www.ruppseeds.com/PumpkinGuide

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



MONSTER SMASH

WORLD OF COLOR

GROWER PREFERRED ALL-STARS

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

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.

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

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

PUMPKINS

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. powdery mildew resistant 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.

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.

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



Very Large

Multi Colored

Mix

50 - 125

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

PUMPKINS GIANT					M=1,00	00 seeds
Priced per package	25 Seeds	100 Seeds	250 Seeds			
Price per 1,000 seeds (M)				1M	3M	Seeds /lb.
					0.01	/110-
38092 Monster Smash		66.30	122.70	327.20		2,900
*	31.60	66.30 105.25			323.95	

definitely create a new concept in fall displays.

our breeding nursery. All of the fruit are pumpkin shaped and will





























38074 World of Color Blend



ORDERS OVER \$350 ARE SHIPPED FREE!









BELLATRIX

EARLY GIANT

EARLY KING

GILTEDGE GOLD

GOLD MEDAL













LLION

GOLD RUSH LARGE MARGE

PHAT JACK

QUIGLEY GOLD

SOLID GOLD

3	
GOLD ME	
GOLD ME	DAI



















PUMPKINS			XTR	A LAR	GE					
		•	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.
*	38009	Early Giant FI	95	25 - 30	Dark Orange	IR	Large Vine	2	30 - 35	Upright fruit on a productive plant with ex- cellent orange color. Intermediate resistance to powdery mildew.
	38011	Early King FI	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 FI 🎷 🏷	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 FI	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™ 🌃	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 FI	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 FI 🌈 🍆	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.













BANNACK GOLD

CARBONADO X

EAGLE CITY GOLD

GARNET GOLD

PUMPKINS XTRA LAR	MPKINS XTRA LARGE M=1,000 se										
Priced per package	250 Seeds										
Price per 1,000 seeds (M)		1M	3M	25M	100M						
38060 Bellatrix FI400	38.70	103.15	99.90	97.40	96.10						
38009 Early Giant FI400	35.95	95.85	92.60	90.10	88.80						
38011 Early King FI400	36.30	96.80	93.55	91.05	89.75						
38123 Giltedge Gold FI400	46.70	124.50	121.25	118.75	117.45						
38050 Gold Medal	25.65	68.30	65.05	62.55	61.25						
38050 Gold Medal F1400	28.10	74.90	71.65	69.15	67.85						
38050U Gold Medal Untreated	25.65	68.30	65.05	62.55	61.25						
38071 Gold Medallion	19.25	51.30	48.05	45.55	44.25						
38071 Gold Medallion FI400	21.75	57.90	54.65	52.15	50.85						

PUMPKINS XTRA LARG	INS XTRA LARGE M=1,000 s							
Priced per package	250 Seeds							
Price per 1,000 seeds (M)		1M	зм	25M	100M			
38523 Gold Rush	14.15	37.65	34.40	31.90	30.60			
38523 Gold Rush FI400	16.60	44.25	41.00	38.50	37.20			
38090 Large Marge FI400	41.00	109.30	106.05	103.55	102.25			
38117 Quigley Gold FI400	46.90	124.95	121.70	119.20	117.90			
38085 Solid Gold	31.65	84.35	81.10	78.60	77.30			
38085 Solid Gold FI400	34.15	90.95	87.70	85.20	83.90			
Priced per package	1 oz.	4 oz.						
Priced per pound in these package sizes			1#	5#	25#			
38500 Jumpin' Jack ™	8.55	25.20	77.40	74.40	72.40			
38072 Phat Jack FI400	17.00	50.25	154.50	151.50	149.50			

PUM	IPKIN	IS	LAR	GE						Pricing on page 86
		•	Days	Weight pounds	Skin	Powdery Mildew	Vine	Spacing Category	Bin Count	Features
;	38068	20 Karat Gold 11 🌃 🖔	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 FI 🎷 🏷	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 FI 🎷 🏷	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 FI	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 FI	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		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 FI	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 FI (*)	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=1,0	000 seeds
Priced per package	250 Seeds				
Price per 1,000 seeds (M)		1M	3M	25M	100M
38068 20 Karat Gold	24.00	64.00	60.75	58.25	56.95
38068 20 Karat Gold FI400	26.50	70.60	67.35	64.85	63.55
38112 Bannack Gold FI400	45.05	120.05	116.80	114.30	113.00
38061 Bayhorse Gold FI400	44.85	119.55	116.30	113.80	112.50
38069 Carbonado Gold FI400	46.50	124.00	120.75	118.25	116.95
38062 Eagle City Gold FI400	40.80	108.80	105.55	103.05	101.75
38113 Garnet Gold FI400	45.40	121.05	117.80	115.30	114.00
38001 Orange Rave FI400	40.80	108.80	105.55	103.05	101.75
38550 Wolf FI400	32.80	87.40	84.15	81.65	80.35

I OWN KINGS EXTREME				141-1,0	oo seeus
Priced per package	250 Seeds				
Price per 1,000 seeds (M)		1M	3M	25M	100M
38068 20 Karat Gold	24.00	64.00	60.75	58.25	56.95
38068 20 Karat Gold F1400	26.50	70.60	67.35	64.85	63.55
38112 Bannack Gold F1400	45.05	120.05	116.80	114.30	113.00
38061 Bayhorse Gold FI400	44.85	119.55	116.30	113.80	112.50
38069 Carbonado Gold FI400	46.50	124.00	120.75	118.25	116.95
38062 Eagle City Gold FI400	40.80	108.80	105.55	103.05	101.75
38113 Garnet Gold FI400	45.40	121.05	117.80	115.30	114.00
38001 Orange Rave FI400	40.80	108.80	105.55	103.05	101.75
38550 Wolf FI400	32.80	87.40	84.15	81.65	80.35

PUMPKINS MID SIZE					M=1,00	0 seeds
Priced per package	250 Seeds					
Price per 1,000 seeds (M)		1M	зм	25M	100M	Seeds /lb.
38045 Gold Standard	16.10	42.90	39.65	37.15	35.85	3,100
38045 Gold Standard FI400	18.60	49.50	46.25	43.75	42.45	3,100
38045U Gold Standard Untreated	16.10	42.90	39.65	37.15	35.85	3,200
38034 Secretariat FI400	36.10	96.20	92.95	90.45	89.15	3,000
38076 Skidoo Gold FI400	38.65	102.95	99.70	97.20	95.90	2,800

PUMPKINS SMALL / F	PIE				M=1,000	0 seeds
Priced per package	250 seed					
Price per 1,000 seeds (M)		1M	3M	25M	100M	Seeds /lb.
38075 Bisbee Gold FI400	41.15	109.70	106.45	103.95	102.65	3,100
38020 Darling F1400	38.25	101.90	98.65	96.15	94.85	4,100
38115 Fort Knox FI400	42.25	112.55	109.30	106.80	105.50	2,500
38003 Jack Sprat FI400	37.30	99.45	96.20	93.70	92.40	5,800
38038 Pik-A-Pie	17.05	45.40	42.15	39.65	38.35	3,800
38038 Pik-A-Pie FI400	19.50	52.00	48.75	46.25	44.95	3,700
38038U Pik-A-Pie Untreated	17.05	45.40	42.15	39.65	38.35	3,800
38067 Prankster FI400	25.50	67.95	64.70	62.20	60.90	3,400
38047 Touch of Autumn	12.30	32.70	29.45	26.95	25.65	5,500
38047 Touch of Autumn FI400	14.75	39.30	36.05	33.55	32.25	5,500
38047U Touch of Autumn Untreated	12.30	32.70	29.45	26.95	25.65	5,500
38116 Yosemite FI400	39.95	106.50	103.25	100.75	99.45	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	5.65	16.65	51.20	48.20	46.20	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

JACK SPRAT

PRANKSTER

YOSEMITE

PUN	MPKIN	IS	SMA	ALL / PIE						
		•	Days	Diameter Height	Weight pounds	Skin	Powdery Mildew	Vine	Spacing Category	Features
*	38075	Bisbee Gold FI 🕜 🍏	90	6 ½ x 6 ½"	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 ^{FI}	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 FI	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 FI 🕜 🍆	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 ½ 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.

 $\underline{www.ruppseeds.com/PumpkinGuide}$

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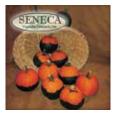
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BATWING MIX

GOLD DUST

GOLD SPECK JACK-B-QUIK

UIK OR

ORANGITA SPARK

Р	UMPKIN	IS	MIN	IIATURE		4				
		*	Days	Diameter Height	Weight pounds	Skin	Powdery Mildew	Vine	Spacing Category	Features
	38548	Batwing Mix	90	3"	1/4	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 FI 141	95	3 ½ x 2"	1/3	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.
										vary in shape, color, and size. We ask that you or this current seed lot.
7	38077	Gold Speck FI 🌃 🍆	95	3 x 2"	1/4	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"	1/4	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 excel- lent display.
	38043	Spark	90	3.5 x 2"	1/2	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 PVP	95	3 x 3"	1/2	Orange		Bush	3	An AAS winner that can be carved and provides excellent plant health on a tight bush plant. A true mini pumpkin.
			fruit s	set. If you for	rce it into t	he survival	mode (mor	e like a we	ed) with lov	trogen causes excessive plant growth and low v nitrogen, plant size will be reduced and fruit trselves low input production improves yields.
	38078	WeeeeeOne Blend F1 🍞 🎳	95	1 ½ x 1 ½" - 3 x 3"	1/2	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 MINIAT	URE				M=1,00	0 seeds
Priced per package	250 seed					Seeds
Price per 1,000 seeds (M)		1M	3M	25M	100M	/lb.
38066 Gold Dust	19.50	51.90	48.65	46.15	44.85	6,600
38066 Gold Dust FI400	21.95	58.50	55.25	52.75	51.45	6,600
38066U Gold Dust Untreated	19.50	51.90	48.65	46.15	44.85	6,700
38077 Gold Speck	24.25	64.55	61.30	58.80	57.50	7,000
38077 Gold Speck FI400	26.70	71.20	67.95	65.45	64.15	7,000
38077U Gold Speck Untreated	24.25	64.55	61.30	58.80	57.50	7,000
38525 Jack-B-Quik	7.85	20.85	17.60	15.10	13.80	7,000
38525 Jack-B-Quik FI400	10.30	27.45	24.20	21.70	20.40	7,000

PUMPKINS MINIAT	URE				M=1,00	0 seeds
Priced per package	250 seed					
Price per 1,000 seeds (M)		1M	зм	25M	100M	Seeds /lb.
38042 Orangita FI400	39.15	104.40	101.15	98.65	97.35	6,500
38043 Spark	36.70	97.80	94.55	92.05	90.75	5,900
38538 Wee-B-Little	12.40	33.00	29.75	27.25	25.95	5,500
38538 Wee-B-Little FI400	14.85	39.60	36.35	33.85	32.55	5,400
38538U Wee-B-Little Untreated	12.40	33.00	29.75	27.25	25.95	5,500
WeeeeeOne Blend 38078 FI400	28.00	74.55	71.30	68.80	67.50	7,600
WeeeeeOne Blend 38078U Untreated	25.50	67.90	64.65	62.15	60.85	7,900







WEE-B-LITTLE

WEEEEEONE 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 MINIATU	JRE				M=1,00	0 seeds
Priced per package	1 oz.	4 oz.				
Priced per pound in these package sizes			1#	5#	25#	Seeds /lb.
38548 Batwing Mix	16.60	49 10	150 95	147 95	145 95	5 800

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

GRIZZLY BEAR

HSC151

INDIAN DOLL















MELLOW YELLOW

MIDNIGHT

NAKED BEAR

NEW ENGLAND CHEDDAR

ONE TOO MANY PORCELAIN DOLL

UMPKIN	NS	SPE	CIALTY					Pricing on page 91
	•	Days	Diameter Height	Weight pounds	Skin	Vine	Spacing Category	Features
38012	Blue Doll ^{F1}	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 F1 RPX-6229	90	9 ½ x 9 ¼"	11 - 12	Tan	Large Vine	3	With its unique tan color, Fool's Gold will catch you 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 ½"	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 tric cooperators.
38093	Goose Bumps II F1	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 ½ x 11"	9 - 14	Medium Orange / Green Stripes	Medium	3	Totally hulless, the roasted seeds are delicious with a nutty texture. Compared to other hulless varieties, maturity is earlier and seed yield is exceptional.
38081	Indian Doll ^{FI}	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 Black Kat F1	77		1 - 1 ½	Black	Semi Bush	4	Very dark green pumpkin having a classic shape wit deep ridges. Will start to turn orange after approxi- mately 2 months of storage. Intermediate tolerance t 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 FI 🎷 🍆	112	8 ½ 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.







ROUGE VIF D'ETAMPES



SCARFACE



SMALL WORLD OF COLOR



THUMPKIN



ICICLE

PUMPKIN	NS	SPE	CIALTY					Pricing on page 91
	•	Days	Diameter Height	Weight pounds	Skin	Vine	Spacing Category	Features
42961	One Too Many FI 🌃 🍅	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 FI	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 FI	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.

PUN	IPKINS SPECIALT	Y				M=1,0	00 seeds
	Priced per package	100 Seed	250 Seed				
	Price per 1,000 seeds (M)			1M	3M	25M	100M
38012	Blue Doll FI400	30.10	55.65	148.30	145.05	142.55	141.25
38114	Fool's Gold FI400	24.30	45.00	120.00	116.75	114.25	112.95
38118	Fright FI400	27.30	50.50	134.60	131.35	128.85	127.55
38093	Goose Bumps II F1400	25.25	46.75	124.65	121.40	118.90	117.60
38128	Grizzly Bear FI400	24.85	46.00	122.55	119.30	116.80	115.50
38048	HSC151	14.35	26.50	70.65	67.40	64.90	63.60
38081	Indian Doll FI400	28.15	52.10	138.85	135.60	133.10	131.80
38044	Mellow Yellow FI400	23.15	42.85	114.15	110.90	108.40	107.10
38089	Midnight Black KatFl400	21.60	40.00	106.55	103.30	100.80	99.50
38030	Naked Bear	18.35	33.95	90.50	87.25	84.75	83.45
42969	New England Cheddar	8.70	16.05	42.70	39.45	36.95	35.65
42969U	New England Cheddar ^{Untreated}	8.70	16.05	42.70	39.45	36.95	35.65
42969	New England Cheddar ^{Fl400}	10.05	18.55	49.35	46.10	43.60	42.30

PUM	I PKINS SPECIALT	Y				M=1,0	000 seeds
	Priced per package	100 Seed	250 Seed				
	Price per 1,000 seeds (M)			1M	3M	25M	100M
42961	One Too Many	38.65	71.55	190.75	187.50	185.00	183.70
42961U	One Too Many Untreated	38.65	71.55	190.75	187.50	185.00	183.70
42961	One Too Many FI400	40.00	74.05	197.40	194.15	191.65	190.35
38029	Porcelain Doll FI400	38.30	70.90	189.00	185.75	183.25	181.95
42953	Red Warty Thing	12.80	23.65	63.00	59.75	57.25	55.95
42953U	Red Warty Thing Untreated	12.80	23.65	63.00	59.75	57.25	55.95
42953	Red Warty Thing FI400	14.10	26.10	69.60	66.35	63.85	62.55
38533	Rouge Vif d'Etampes	16.70	30.85	82.25	79.00	76.50	75.20
38127	Scarface FI400	25.25	46.75	124.65	121.40	118.90	117.60
38084	Small World of Color	52.25	96.75	257.95	254.70	252.20	250.90
38549	Thumpkin FI400	18.90	35.00	93.30	90.05	87.55	86.25
	Priced per package	1 oz.	4 oz.				
	Priced per pound			1#	5#	25#	Seeds /Ib
42939	Jarrahdale	5.70	16.80	51.60	48.60	46.60	2,800











































BLANCO

COTTON CANDY

ABON

CRYSTAL STAR

POLAR BEAR

PUN	MPKIN	IS	WHI	TE						
			Days	Diameter Height	▲ Weight pounds	Skin	Powdery Mildew	Vine	Spacing Category	Features
	38532	Baby Boo PVP	100	3 x 2"	1/4	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 ^{FI}	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 FI	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	lcicle ^{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 FI 🎷 🏷	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	A smooth, bright white-skinned pumpkin for painting.
NEW	38100	Abominable	110	9x9	12 - 15	White	T	Vine	2	A round white pumpkin with a strong handle. Has good color retention and a full vine.
	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.

RAD	DISH				
		•	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.
NEW	39106	Regal Red ^{FI}	24	Globe	A fast-maturing summer radish that produces uniform, round bulbs.

RADISH		WIN	VINTER / 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.					
NEW	41003	SV2146VB	60	SV2146VB is a good option for growers looking for a semi-savoy variety with high yield potential, good quality, and exceptional pliability. It features rich, dark leaves that are great for bunching.					

PUN	IPKINS WHITE					M=1,0	000 seeds
	Priced per package	100 seed	250 seed				
	Price per 1,000 seeds (M)			1M	3M	25M	100M
38100	Abominable FI400		41.25	109.95	106.70	104.20	102.90
38033	Blanco FI400		39.30	104.70	101.45	98.95	97.65
38032	Casperita FI400		44.30	118.05	114.80	112.30	111.00
38065	Cotton Candy		18.10	48.25	45.00	42.50	41.20
38065	Cotton Candy FI400		20.60	54.85	51.60	49.10	47.80
38065U	Cotton Candy Untreated		18.10	48.25	45.00	42.50	41.20
38086	Crystal Star FI400	47.75	88.40	235.65	232.40	229.90	228.60
38086U	Crystal Star Untreated	46.40	85.90	229.05	225.80	223.30	222.00
38510	Flat White Boer		22.35	59.55	56.30	53.80	52.50
	Flat Stacker FI400	20.40	37.70	100.50	97.25	94.75	93.45
38547	Full Moon	39.65	73.35	195.55	192.30	189.80	188.50
38122	Icicle FI400		36.05	96.05	92.80	90.30	89.00
38129	Polar Bear FI400	33.85	62.65	166.95	163.70	161.20	159.90
20004	Snowball FI400		46.00	122.55	119.30	116.80	115.50
30004							
	White Gold FI400	25.60	47.35	126.20	122.95	120.45	119.15
	White Gold F1400 Priced per package	25.60	47.35 1 oz.	126.20 4 oz.	122.95	120.45	119.15
		25.60			122.95	120.45	119.15 25#
38119	Priced per package Priced per pound	25.60					

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RADISH				M=1,	,000 seeds
	Priced per package	4 oz.			
	Priced per pound in these package sizes		1#	5#	25#
39003U Cham	pion Untreated	5.30	12.60	12.35	12.10
39001 Easter	Egg II	10.00	23.75	23.50	23.25
39007U French	n Breakfast Untreated	5.65	13.45	13.20	12.95
	Priced per 1,000 seeds in these package sizes	10M	50M	250M	1000M
39105 Crunc	hy King	1.72	1.62	1.57	1.52
39102 Pearl		3.04	2.94	2.89	2.84
39106 Regal	Red	1.72	1.62	1.57	1.52

RADISH WINTER/ORIENTAL		M=1,0	000 seeds
Price per 1,000 seeds (M)	1M	5M	25M
39701 April Cross	13.80	12.10	11.00

SPINACH Hybrid		M=1	,000 seeds	
Price per 1,000 seeds (M)	5M	25M	250M	1,000M
41002 Kona F300	0.61	0.53	0.48	0.45
41001 Olympia F300	0.58	0.50	0.45	0.42
41003 SV2146VB	0.61	0.53	0.48	0.45



SQUASH SUMMER

PI ANTING

Direct seed into field. Plant ½" - ¾" 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.

HARVES1

Harvest every other day. Fruit should be 7 - 8" in length and 1 - $2\frac{1}{2}$ " in diameter. Another way to determine harvestablity 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

vviviv - vvatermeion iviosaic 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.







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/%
December6%
January 5%
February 4%
March 3%
April2%

















GREEN MACHINE

PAYCHECK

SPINELESS BEAUTY

SPINELESS STA

SQUASH SUMMER GREEN Hybrid								Pricing on page 96
	•	Days	Harvest Length	Color	Туре	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.
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.

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GROWER PREFERRED ALL-STARS

SUMMER SQUASH

GREEN

Green Machine has picked up steam with growers over the past few years. Its traditional zucchini look has helped growers improve yield and quality without using old and worn out varieties.

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.

Our second best selling yellow summer squash is **Grandprize**. Having solid performance over the past several years has earned its spot as a grower preferred. It has one of the best disease packages for summer squash and it will yield.

Pete Dinius Product Development



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SQUASH SUMMI	SQUASH SUMMER GREEN Hybrid						
Price per package	100 Seeds	250 Seeds					
Price per 1,000 seeds (M)			1M	3M	25M	50M	55M
42092 Basima	11.85	19.70	56.20	48.85	47.10		46.10
42096 Dunja FI400	18.90	31.45	89.80	78.05	76.30	75.30	
Green 42009 Machine FI400	18.60	30.95	88.35	76.80	75.05	74.05	
42088 Paycheck FI400	22.65	37.75	107.85	93.75	92.00		91.00
Spineless 42027 Beauty FI400	16.05	26.75	76.40	66.40	64.65		63.65
Spineless 42094 Perfection FI400	21.55	35.85	102.30	88.95	87.20		86.20
42135 Starship FI400	8.85	14.70	41.95	36.45	34.70		33.70

SQUASH SUMMER YE	M=1,000 seeds					
Price per package	100 Seeds	250 Seeds				
Price per 1,000 seeds (M)			1M	5M	25M	80M
42018 Blonde Beauty F1400	13.30	22.10	63.05	54.80	53.05	52.05
42081 Gentry FI400	9.85	16.35	46.60	40.50	38.75	37.75
42049 Grandprize FI400	18.80	31.30	89.40	77.70	75.95	74.95
42010 Sunburst FI400	15.45	25.75	73.55	63.95	62.20	61.20
Price per package	100 Seeds	250 Seeds				
Price per 1,000 seeds (M)			1M	3M	25M	80M
42133 Golden Glory FI400	18.85	31.35	89.55	77.85	76.10	75.10
42080 One Ball	16.30	27.15	77.55	67.40	65.65	64.65

SQUASH SUMMER OP

Priced per package	4 oz.		
1 1 0	7 02.		
Priced per pound in these package sizes		1#	5#
42112U Dark Green Zucchini Untreated	10.05	26.50	26.25
42107U Golden Zucchini Untreated	11.20	29.65	29.40













GOLDEN GLORY

GRANDPRIZE

ONE BALL

SUNBURST

SQUASH	Pricing on page 96						
	Days	Harvest Length	Color	Туре	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 Slickpik series. Standard commercial shape with an open plant makes a desirable package all around!
42081 Gentry	43	1 ¾ X 6"	Yellow	Semi-Crook- neck	Crook	PM, CMV	Gentry, a vigorous semi-crookneck summer squash, consistently produces outstanding yields of butter yellow, smooth-skinned fruit. Outstanding smoothness even under stress helps ensure marketability of fruit.
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 vig- or, 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			MER OF	Pricing on page 96			
	*	Days	Harvest Length	Color	Туре	Fruit Shape	Features
				Medium Dark			
42112	Dark Green Zucchini	62	6 - 7"	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.



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SQUASH WINTER

PLANTING

Plant seeds $\frac{1}{2}$ " - $\frac{3}{4}$ " 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 $45 - 55^{\circ}F$ 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 skins
- 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		WIN	ITER A	CORN			
	•	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 1/4	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 FI 🎷 🏷	80	4 x 5"	1 ½	Light Yellow / Orange Sutures	Compact Bush	A gold striped acorn hybrid with exceptional eating quality. Is also decorative. A sure winner.
42304	Cream of the Crop FI	85	6 x 5"	1 ½ - 2	Cream	Compact Bush	AAS winner. Unique creamy white fruit. Uniform size.
42952	0	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 FI	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 Fl 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 ACO	RNI				M=1.00	O soods
		4 oz.			IVI=1,00	o seeas
Priced per package	1 oz.	4 oz.				
Priced per pound in these package sizes			1#	5#	20#	Seeds /lb.
42309 Table Treat	10.50	33.25	91.25	90.25	88.75	4,600
Priced per package	250 Seeds					
Price per 1,000 seeds (M)		1M	3M	25M	55M	Seeds /lb.
42311 Autumn Delight	20.65	55.00	52.00	50.00	49.00	4,300
42311 Autumn Delight F1400	21.90	58.30	55.30	53.30	52.30	4,300
42311U Autumn Delight Untreated	20.65	55.00	52.00	50.00	49.00	
42308 Autumn Perfection FI400	21.55	57.45	54.45	52.45	51.45	
42955 Celebration	13.65	36.30	33.30	31.30	30.30	4,800
42955 Celebration FI400	14.85	39.60	36.60	34.60	33.60	4,800
42304 Cream of the Crop	14.60	38.85	35.85	33.85	32.85	4,000
42304 Cream of the Crop FI400	15.85	42.15	39.15	37.15	36.15	4,000

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SQUASH WINTER ACO	RN				M=1.00	0 seeds
Priced per package	250 Seeds					
Price per 1,000 seeds (M)		1M	3M	25M	55M	Seeds /lb.
42952 Harlequin	13.00	34.60	31.60	29.60	28.60	4,400
42930 Heart of Gold	14.80	39.40	36.40	34.40	33.40	4,900
42930 Heart of Gold FI400	16.05	42.70	39.70	37.70	36.70	4,900
42302 Mashed Potato	16.55	44.10	41.10	39.10	38.10	5,900
42301 Table Ace	16.35	43.50	40.50	38.50	37.50	4,400
42301 Table Ace FI400	17.55	46.80	43.80	41.80	40.80	4,400
42301U Table Ace Untreated	16.35	43.50	40.50	38.50	37.50	4,400
42310 Table Star	12.30	32.80	29.80	27.80	26.80	3,900
42310 Table Star FI400	13.55	36.10	33.10	31.10	30.10	3,900
42307 Taybelle PM FI400	17.35	46.25	43.25	41.25	40.25	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	Planting Date: May 1	Planting Date: May 15	Planting Date: June 1	Planting Date: June 15	Planting Date: July 1
Maturity	Harvest Range	Harvest Range	Harvest Range	Harvest Range	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

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

WINTER SQUASH

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.

























ORDERS OVER \$350 ARE SHIPPED FREE!

MASHED POTATO

TABLE ACE

TABLE STAR

TABLE TREAT













AUTUMN CUP

SPACE STATION

SUNSHINE

SUN SPOT

SWEET MAMA

THUNDER

SQUASH	WIN	WINTER BUTTERCUP / KABOCHA							
•	Days	Fruit Size	Weight pounds	Color	Habit	Features			
42935 Autumn Cup FI	95	6"	4 1/2	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 ^{FI} ***	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 (7)	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 Fi	85	8 - 9 x 5"	4	Dark Green	Semi Bush	AAS winner. A kabocha with sweet flavor that stores well.			
42968 Thunder F1 6	85	7 x 4"	3 1/2	Black Green	Vine	A buttercup (kabocha) hybrid that is an excellent yielder with dry sweet flesh.			

SQUASH WINTER BU	IA	M=1,000 seed:			
Priced per package	1 oz.	4 oz.			
Priced per pound in these package sizes			1#	5#	20#
42904 Buttercup Burgess	5.00	15.50	42.20	41.20	39.70
42905 Sweet Mama FI400	30.75	99.50	273.90	272.90	271.40

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	29.05	77.35	74.35	72.35	71.35					
42935 Autumn Cup FI400	30.30	80.70	77.70	75.70	74.70					
42962 Space Station	37.95	101.15	98.15	96.15	95.15					
42962 Space Station FI400	39.20	104.45	101.45	99.45	98.45					
42962U Space Station Untreated	37.95	101.15	98.15	96.15	95.15					
42902 Sunshine	25.50	67.95	64.95	62.95	61.95					
42966 Sun Spot	26.95	71.85	68.85	66.85	65.85					
42966 Sun Spot F1400	28.20	75.15	72.15	70.15	69.15					
42968 Thunder	30.25	80.55	77.55	75.55	74.55					
42968 Thunder FI400	31.50	83.90	80.90	78.90	77.90					













BETTERNUT 23

BETTERNUT 401

BETTERNUT 1744

BUTTERBABY

HONEYNUT

sal	JASH		WINTE	R BUTTI	ERNUT			
		•	Days	Fruit Size	Weight pounds	Color	Habit	Features
	42613	Avalon FI	88	11"	4 - 5	Buff	Vine	This Hollar Seeds butternut is a good packing and high yielding variety.
	42606	Betternut 23 F1 pmt	105	12 - 15"	6 - 8	Buff	Vine	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.
	42614	Betternut 401 F1 pmt	80	8 - 9"	2 3/4	Light Tan	Semi Bush	A hybrid with good flesh color and uniformity on a semi bush plant. Powdery mildew tolerant.
*	42622	Betternut 900 F1 pmt	80	8 - 9"	3	Light Tan	Semi Bush	Overall best variety in the Betternut series for boxing. Powdery mildew tolerant.
	42976	Betternut 1744 F1 pmt	80	8 - 9"	3 1/4	Light Tan	Semi Bush	Slightly larger than Betternut 900 for farm markets and roadside stands. Provides powdery mildew tolerance.
	42607	Butterbaby 🌑	100 - 105	5 - 6"	½ - 1	Buff	Semi Bush	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.
	42702	Honeynut	105 - 110	4 - 5"	1/2 - 1	Dark Tan	Restricted Vine	Produces single-serving squash with very sweet and delicious flavor. Very high yielding.
*	42615	Ultra ^{F1}	90	15"	10	Light Tan	Vine	A high yielding large butternut for both processors and market gardeners.

SQU	I ASH WINTER B	UTTER	NUT	M=1,000 seeds				
	Priced per package	250 Seeds						
i	Price per 1,000 seeds (M)		1M	3M	25M	100M	Seeds /lb.	
42613	Avalon FI400	25.45	67.75	64.75	62.75	61.75	5,000	
42606	Betternut 23	16.25	43.25	40.25	38.25	37.25	5,000	
42606	Betternut 23 FI400	17.50	46.55	43.55	41.55	40.55	5,000	
42614	Betternut 401	15.55	41.45	38.45	36.45	35.45	6,000	
42614	Betternut 401 FI400	16.80	44.75	41.75	39.75	38.75	6,000	
42622	Betternut 900	18.00	47.95	44.95	42.95	41.95	4,600	
42622	Betternut 900 FI400	19.25	51.30	48.30	46.30	45.30	4,600	
42622U	Betternut 900 Untreated	18.00	47.95	44.95	42.95	41.95	4,600	
42976	Betternut 1744	15.50	41.30	38.30	36.30	35.30	5,000	
42976	Betternut 1744 FI400	16.75	44.60	41.60	39.60	38.60	5,000	
42607	Butterbaby FI400	16.75	44.60	41.60	39.60	38.60	5,800	
42702	Honeynut	13.30	35.40	32.40	30.40	29.40		
42615	Ultra FI400	25.00	66.60	63.60	61.60	60.60	4,500	













BUSH DELICATA

FESTIVAL

SWEET LIGHTNING

UGLY	DUN	/IPL	ING	4

SQUASH		WIN	ITER DE	LICATA	/ SWEET D	UMPLIN	IG
	•	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	lvory / 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	Colorful, acorn shape, sweet flesh. Stores 3 - 4 months.
42501	Sweet Lightning F1 pmt	100	3 x 5"	1 - 1 1⁄4	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 FI 🌃 🖔	100	2 ½ x 3 ¾	³ ⁄ ₄ - 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 DEL	ICATA	/ SWEI	ET DUN	/PLING	j
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 FI400	15.00	47.75	131.65	130.65	129.15
Priced per package	250 Seeds			M=1,0	00 seeds
Price per 1,000 seeds (M)		1M	ЗМ	25M	100M
42957 Bush Delicata	13.70	36.45	33.45	31.45	30.45
42957 Bush Delicata FI400	14.95	39.80	36.80	34.80	33.80
42933 Jester	17.15	45.70	42.70	40.70	39.70
42501 Sweet Lightning	23.45	62.50	59.50	57.50	56.50
42501 Sweet Lightning FI400	24.70	65.80	62.80	60.80	59.80
42934 Ugly Dumpling FI400	25.35	67.50	64.50	62.50	61.50



HEAVENLY HUBBARD

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SQUASH		WIN	ITER HU	IBBARD			
	_	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 HUBBA	M=1,000 seeds					
Priced per package	1 oz.	4 oz.				
Priced per pound in these package sizes			1#	5#	25#	
42906 Blue Hubbard	4.75	14.50	39.50	38.50	37.00	
42944 Blue Magic	15.50	49.00	134.80	133.80	132.30	
42908 Chicago Warted	4.50	13.75	37.80	36.80	35.30	
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	15.50	49.00	135.10	134.10	132.60	

Priced per package	250 Seeds				
Price per 1,000 seeds (M)		1M	3M	25M	55M
Blue Hubbard New 42918 England	17.35	46.15	43.15	41.15	40.15
Blue Hubbard New 42918 England F1400	18.55	49.45	46.45	44.45	43.45
42907 Golden Delicious	9.05	24.10	21.10	19.10	18.10
42907 Golden Delicious FI400	10.30	27.40	24.40	22.40	21.40
42977 Heavenly Hubbard	60.15	160.35	157.35	155.35	154.35











PINNACLE

PRIMAVERA

SPAGHETTI

VEGETABLE SPAGHETTI

SQUASH		WIN	WINTER SPAGHETTI							
	*	Days	Fruit Size	Weight pounds	Color	Habit	Features			
42950	Pinnacle ^{FI}	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 1/2	Creamy Yellow	Vine	Sakata's popular OP spaghetti squash introduced years ago. Long, oval shaped with noodle-like strands inside when cooked.			

SQUASH WINTER SPAGE		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	22.00	60.25	59.25	57.75		
42981 Vegetable Spaghetti Sakata F1400	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	38.35	102.15	80.40	79.90	2,600		
42946 Primavera FI400	30.25	80.65	63.50	63.00	3,500		
42929 Stripetti	29.15	77.70	61.15	60.65	5,900		





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MARINA DE CHIOGGIA



RUPP'S TURK'S TURBAN



TINY TURK

SQUASH		WIN.	TER OTH	IER			
	_	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 Peanut	100	6 ½ 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 ½ - 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 ½ - 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=1,00	0 seeds
Priced per package	1 oz.	4 oz.			
Priced per pound in these package sizes			1#	5#	25#
42901 Banana Pink Jumbo	7.25	22.25	60.80	59.80	58.30
42948 Georgia Candy Roaster	8.00	25.00	68.65	67.65	66.15
42938 Tricolor Cushaw	7.75	24.00	66.05	65.05	63.55
26007 Turk's Turban	7.00	21.75	59.40	58.40	56.90

SQUASH WINTER OTHER				M=1,00	0 seeds
Priced per package	250 Seeds				
Price per 1,000 seeds (M)		1M	3M	25M	55M
42989 Autumn Frost	29.05	77.40	74.40	72.40	71.40
42971 Galeuse d'Eysines Peanut	27.30	72.80	69.80	67.80	66.80
42971U Galeuse d'Eysines Peanut Untreated	27.30	72.80	69.80	67.80	66.80
42971 Galeuse d'Eysines Peanut FI400	28.55	76.10	73.10	71.10	70.10
42970 Marina de Chioggia	32.35	86.25	83.25	81.25	80.25
42970U Marina de Chioggia Untreated	32.35	86.25	83.25	81.25	80.25
42970 Marina de Chioggia FI400	33.60	89.55	86.55	84.55	83.55
26017 Rupp's Turk's Turban F1400	21.90	58.30	55.30	53.30	52.30
26024 Tiny Turk	16.50	43.90	40.90	38.90	37.90
26024 Tiny Turk FI400	17.70	47.20	44.20	42.20	41.20



IMPROVED





GOLDY DOUBLE



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SUNFLO	WER & CUT FLOW	'ERS	Pricing on page 107 & 109
	•	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 47081	Golden Ray ^{F1}	50-55	A unique "Gladiola" flower arrangement along the stem. Flower dia. 5-10cm. Excellent for a cut flower as well as a garden ornament. Best performance when top flower removed.
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 seed			
Priced per package	1 oz.	4 oz.			
Priced per pound in these package sizes			1#	5#	50#
47005U Giant Striped Untreated		8.10	14.70	14.20	13.95
47016U Lemon Queen Untreated	5.25	17.10	48.15	47.15	
47014U Sunspot Dwarf Untreated	5.20	17.00	47.85	46.85	
47015U Velvet Queen Untreated	5.15	16.85	47.40	46.40	

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

































PROCUT BICOLOR



PROCUT PLUM



PROCUT RED



PROCUT WHITE LITE



PROCUT WHITE NITE



PROCUT HORIZON





SUNFILL GREEN



SUNFILL PURPLE



SUNRICH GOLD



SUNRICH LEMON



SUNRICH LIME

ORANGE EX	CEL SUNFILL GRE	EEIN	SUNFILL FURFLE	SUNKICH GOLD	SUNKICH LEIVION	SOINKICH LIIVIE
SUNFLO	WER & CUT FLOWE	RS				Pricing on page 109
	*	Days	Features			
Cut Flowers						
ProCut Series	s Sunflowers					
	ProCut Series Sunflowers ar All of the ProCut varieties a			ants are strong single stems th	aat are 60 - 72" high with 4 - 6	" blooms.
47037	ProCut Bicolor	50-60			include ProCut Bicolor. A spla or sunflower available to grow	
47036	ProCut Horizon	45-55	A brand new ProCut perfect upward facing		g orange petals surrounding a	traditional dark disc, with
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? Mau	ve? Unique plum colored peta	ıls.	

17 000	riocat ilolizon	40-00	perject upwara jacing biobins.
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
47042	SunFill Purple	55-60	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.
Sunrich Serie	s Sunflowers		
47001	Sunrich Gold	55-70	
47002	Sunrich Lemon	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
47006	Sunrich Lime	55-70	sown with a 5" spacing. Need to keep a dense planting. Over fertilizing will cause the flower to grow too big for floral purposes.
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.

Tall-growing, well-branched Zinnia with bright rose 4-5" double blooms. Very uniform 28-36" height. A prized cut flower.

50002 Uproar Rose Zinnia

70-80



SUNRICH ORANGE

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SUNRICH LIMONCELLO SUMMER



BENARY GIANT MIX



UPROAR ROSE





SUPER VERDE

SWISS CHARD			
	A	Days	Features
43006	Celebration	60	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 Australian Heirloom	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			
SUNFLOWER		M=1,0	00 seeds
Priced per package	500 Seeds		
Price per 1,000 seeds (M)		1M	5M
Cut Flowers			
47081U Golden Ray Unttreated	32.25	51.00	46.20
47010U Goldy Double Untreated	17.25	27.25	24.70
47007U Full Sun Improved Untreated	28.75	45.25	40.95
47037U ProCut BiColor Untreated	20.50	32.50	29.40
47036U ProCut Horizon Untreated	20.50	32.50	29.40
47035U ProCut Orange Excel Untreated	20.50	32.50	29.40
47033U ProCut Plum Untreated	20.50	32.50	29.40
47034U ProCut Red Untreated	23.00	36.50	33.10
47031U ProCut White Lite Untreated	28.75	45.25	40.95
47032U ProCut White Nite Untreated	28.75	45.25	40.95
47080U ProCut Blend Untreated	25.50	40.25	36.50
47041U SunFill Green Untreated	28.75	45.25	40.95
47042U SunFill Purple Untreated	28.75	45.25	40.95
47001U Sunrich Gold Untreated	31.00	49.00	44.45
47002U Sunrich Lemon Untreated	31.00	49.00	44.45
47006U Sunrich Lime Untreated	31.00	49.00	44.45
47004U Sunrich Limoncello Summer Untreated	31.00	49.00	44.45
47003U Sunrich Orange Untreated	31.00	49.00	44.45
47070U Sunrich Blend Untreated	31.25	49.50	44.95

SUNFLOWER			M=1,	000 seeds
	Priced per package	250 Seeds		
	Price per 1,000 seeds (M)		1M	5M
Zinnia				
50001U Benary Giant 2	25.00	39.50	35.90	
50002U Uproar Rose Z	70.00	111.00	100.80	

SWISS CHARD M=1,000 see									
Priced per package	4 oz.								
Priced per pound in these package sizes		1#	5#	25#					
43004U Five Color Untreated	13.30	34.65	34.40	33.90					
43002U Rhubarb Untreated	9.35	24.40	24.15	23.65					
Priced per 1,000 seeds in these package sizes	10M	25M	250M	1000M					
43006 Celebration	4.05	3.80	3.65	3.55					

TOMATILLO M=1,000 seeds									
Priced per package	100 Seeds	500 Seeds							
Price per 1,000 seeds (M)			1M	5M	25M	100M			
44530 Super Verde	4.85	16.15	25.80	22.40	20.35	19.35			



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.

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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 X

EARLY GIRL PLUS LEM

LEMON BOY PLUS

PINK DELICIOUS

RUBEE GODDESS

TOMATO	HOME GARDEN / BEDDING Hybrid								
	•	Days	Use	Weight ounces	Shoulders	Shape	Habit	Disease	Features
44002	Better Boy	75	HG	8	GS	С	INDT	ASC, FR ¹ , GLS, N, VW	Widely adapted.
44080	Better Boy Plus 🚮	77	FM/HG	8	GS	С	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	С	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	В	INDT	VW	Popular, early home garden variety.
44098	Early Girl Plus 🚳	60	HG	4 - 6	GS	В	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	С	INDT	ASC, FR ¹ , GLS, N, VW	Lemon colored, sweet flavored.
44083	Lemon Boy Plus 📣	70	FM/HG	7	GS	С	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.
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	С	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.
44124	RuBee Goddess 🐼	60- 65	FM/HG	7	GS	С	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 G						
Priced per package	100 Seeds	500 Seeds			M=1,00	0 seeds
Price per 1,000 seeds (M)			1M	5M	25M	100M
44002 Better Boy	9.90	37.95	60.70	52.75	47.95	45.65
44080 Better Boy Plus	9.90	37.95	60.70	52.75	47.95	45.65
44076 Big Beef	12.65	48.50	77.60	67.45	61.30	58.35
44081 Big Beef Plus	12.65	48.50	77.60	67.45	61.30	58.35
44003 Big Boy Burpee's	6.75	25.90	41.40	36.00	32.70	31.10
44006 Celebrity	12.25	47.05	75.25	65.40	59.45	56.60
44082 Celebrity Plus	12.25	47.05	75.25	65.40	59.45	56.60

TOMATO HOME G						
Priced per package	100 Seeds	500 Seeds			M=1,00	00 seeds
Price per 1,000 seeds (M)			1M	5M	25M	100M
44035 Early Girl	9.65	37.05	59.25	51.50	46.80	44.55
44098 Early Girl Plus	9.65	37.05	59.25	51.50	46.80	44.55
44009 Lemon Boy	13.30	51.00	81.55	70.90	64.45	61.35
44083 Lemon Boy Plus	13.30	51.00	81.55	70.90	64.45	61.35
44095 Pink Delicious	13.40	51.35	82.15	71.40	64.90	61.80
44085 RuBee Dawn	27.30	104.95	174.85	158.95	151.35	144.10
44124 RuBee Goddess	27.30	104.95	174.85	158.95	151.35	144.10

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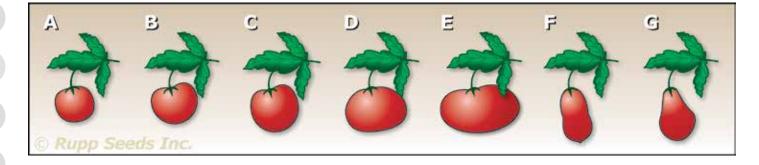




BHN-964 CAROLINA GOLD

FLORIDA 7514

LAGUNA RED



TOMATO	FRE	SH MA	RKET	Hybrid				
•	Days	Use	Weight ounces	Shoulders	Shape	Habit	Disease	Features
44214 BHN-964	76	FM, S	10	UG	С	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 鈊	75	HG, FM	10 - 12	GS	С	DT	FR ^{1,2} , VW	A yellow hybrid from Syngenta and North Car- olina State University with very small blossom scar, tolerance to cracking and weather check.
44120 Florida 47 R	75	S	10	UG	С	DT	ASC, FR ^{1,2} , GLS, VW	A Seminis hybrid with exceptional firmness and fruit quality.
44159 Florida 7514 	75	FM, S	10	UG	С	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	С	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.

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.

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 MAN

RAMBLER

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	С	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 attrac- tive 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	С	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.
44123	Rambler 🚰	68- 72	FM, S	8 - 12	UG	С	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	С	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	С	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	С	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	С	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	С	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.

TON	MATO FRESH M	d		M=1,0	00 seeds		
	Priced per package	100 Seeds	500 Seeds				
Pı	rice per 1,000 seeds (M)			1M	5M	25M	100M
44214P	BHN-964 Pelleted	18.10	69.60	115.95	105.40	100.35	95.55
44126P	Carolina Gold Pelleted	14.15	54.25	90.40	82.15	78.20	74.45
44120P	Florida 47 R Pelleted	17.00	65.35	108.90	99.00	94.25	89.75
44159	Florida 7514	9.20	35.20	58.65	53.30	50.75	48.30
44045	Grand Marshall	19.60	75.25	125.40	114.00	108.55	103.35
44061P	Laguna Red Pelleted	19.70	75.70	126.15	114.65	109.15	103.95
44071	Mountain Man	13.50	51.85	86.35	78.50	74.75	71.15

TOMATO FRESH	MARKE	T Hybri	d		M=1,0	00 seeds
Priced per packag	100 ge Seeds	500 Seeds				
Price per 1,000 seeds (M	()		1M	5M	25M	100M
44123P Rambler Pelleted	22.05	84.75	141.25	128.40	122.25	116.40
44063P Red Snapper Pelleted	22.05	84.75	141.25	128.40	122.25	116.40
44048P Roadster Pelleted	19.75	75.90	126.50	115.00	109.50	104.25
44057P Saybrook Pelleted	18.15	69.75	116.20	105.60	100.55	95.75
44022P Skyway 687 Pelleted	18.85	72.45	120.70	109.70	104.45	99.45
44086 STM2255	30.40	116.80	194.60	176.90	168.45	160.40

B

































GOLD SPARK



RUBY CRUSH



SWEET GOLD



SWEET HEARTS



TIDY TREATS

ОМАТО		CHE	ERRY H	lybrid			
	*	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	.45	Globe	INDT	FR¹, 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	.45	Grape	INDT	Ff, ToMV ⁰⁻² , 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	FR¹ VW	High yields with controlled growth.
44165	Red Grape	68	.35	Grape	INDT		A superior flavored grape tomato from D. Palmer Seed with firm excellent shaped red fruit.
44047	Ruby Crush 🐔	65	.45	Grape	DT	FCR, FR ^{1,2} , ToMV ⁰⁻² , GLS	Deep red fruit that are very smooth, uniform and firm with a good flavor profile. Limited to no pruning necessary. High yield potential.
44125	Sweet Gold	65	.35	Cherry	INDT	FR ¹ , ToMV	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	.45	Grape	INDT	Ff, Fol, ToMV ⁰⁻²	Hybrid from Sakata with excellent crack resistance, shelf life, higi Brix and yields. Sets under cooler conditions than most grapes.
44049	Tidy Treats 🐔	50- 55	.24	Cherry	DT	FR, VW	Tons of fruit on a compact plant. Good in small-space gardens and containers.
pen Pollinat	ted						
44068	Artisan Bumble Bee Mix	70	.78		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 Hybr	rid	M=1,000 seeds						
Priced per package	100 Seeds	500 Seeds						
Price per 1,000 seeds (M)			1M	5M	25M			
44140P BHN-268 Pelleted	49.65	164.90	274.80	261.70	249.20			
44059 Chocolate Sprinkles	26.70	88.65	147.75	140.95	134.20			
44087 Gold Spark	72.80	241.75	402.85	383.65	365.35			
44103 Husky Cherry Red	7.30	26.90	43.00	37.35	33.95			
44165 Red Grape	30.40	100.85	168.05	160.35	152.70			
44047 Ruby Crush	46.65	154.95	258.20	246.35	234.60			
44125 Sweet Gold	7.30	27.00	43.20	37.55	34.10			
44199 Sweet Hearts	65.35	217.00	361.60	344.35	327.95			
44222 Sweet Treats	58.20	193.35	322.20	306.85	292.20			
44049 Tidy Treats	14.40	47.75	79.55	75.90	72.25			
* Multiple packages may be used	to fill order	s for these qu	uantities.					

TOMATO CHERRY Open Pol	TOMATO CHERRY Open Pollinated							
Priced per package	100 Seeds	500 Seeds						
Price per 1,000 seeds (M)			1M	5M				
44068 Artisan Bumble Bee Mix	9.20	34.00	54.40	47.30				

TOMAT	O GREENHOUSE	M=1,000 seeds							
	Priced per package	100 Seeds 500 Seeds							
	Price per 1,000 seeds (M)			1M					
44093U Ford	nti Untreated	132.75	510.45	850.70					
44020U Tore	ro Untreated	129.55	498.20	830.30					
44198 Arno	old Rootstock Pelleted	65.65	252.50	420.80					
* Mul	* Multiple packages may be used to fill orders for these quantities.								



ARTISAN BUMBLE BEE MIX



FORONTI



SAKATA° MARIANA

syngenta*

♦ US Agriseeds

MONTICELLO SAN MARZANO

томато		GREENHO	JSE 🖸	١		Pricing on page 114
	_	Use	Weight ounces	Shape	Disease	Features
44093	Foronti		9 - 11	Round	Fol ^{1,2} , For, Va ¹ , Vd ¹ , ToMV ⁰⁻²	For growers needing an attractive, red colored large beef variety with intermediate resistance to Powdery Mildew, Foronti tomato hybrid provides a high total production potential with a high average fruit weight.
44020	Torero	Cold Greenhouse & Tunnels	8 - 9	Round	Ff ^{A-E} , Fol ^{0,1} , For, Va ⁰ , Vd ⁰ , ToMV ⁰⁻² , ToTV	Large beef variety with excellent fruit quality and shelf life. Maintains an excellent fruit size even during summer. For the highest yield potential, should be grafted onto Maxifort.
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 suitable for vigorous varieties, late plantings in the spring or in vegetative conditions; such as growers that produce without heat to save energy.

TOMATO		PRC	CESSI	NG / S	ALADE	TTE Hybri	d	
		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.
NEW 44555	Inca	65- 70	FM, S	5	F	DT	ASC, FOL ^{1,2,3} , VW	Inca is a blocky, elongated-shaped hybrid with large and extra large fruit combined with early maturity. Fruit is deep red, firm, and has a good shelf-life. The plants are medium compact, have mid cover and can set more continuously than other types in this class.
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 Rutabaga	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 PROCES	TOMATO PROCESSING/SALADETTE Hybrid									
Priced per package	100 Seeds	500 Seeds								
Price per 1,000 seeds (M)			1M	5M	25M	100M				
44062P BHN-1045 Pelleted	18.10	69.60	115.95	105.40	100.35	95.55				
44555 Inca	16.35	62.85	104.75	95.20	90.65	86.30				
44176P Mariana Primed Pelleted	14.30	55.00	91.65	83.30	79.30	75.50				
44224P Monticello Pelleted	12.25	47.05	78.40	71.25	67.85	64.60				
44091 San Marzano	15.05	57.75	96.25	87.50	83.30	79.30				
* Multiple packages may	* Multiple packages may be used to fill orders for these quantities.									

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TURNIPS / RUTABAGA					
Priced per package	1 oz.	4 oz.			
Priced per pound in these package sizes			1#	5#	50#
45903 Laurentian Rutabaga	4.20	14.45	40.35	39.35	
45501U Purple Top White Globe Untreated		6.85	16.75	16.25	15.75
45001 Tokyo Cross	25.15	87.35	244.30	243.30	



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









SANGRIA

JADE STAR

YELLOW DOLL

WATERMELON	LAF	ARGE Hybrid						
•	Days	Shape	Weight pounds	Rind Type	Flesh Color	Seed Size	Disease	Features
46041 Estrella 139	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 139	85	Elongated	18 - 22	Allsweet	Bright Red	Large	A, F	Good field performance with excellent taste.

WATERM	ELON	ICE	вох						
	•	Days	Shape	Weight pounds	Rind Type	Flesh Color	Seed Size	Disease	Features
46051	Jade Star Pata Negra 139	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 139	68	Oval	5 - 7	Medium Green / Dark Stripes	Yellow	Small		Unusual, very sweet home garden hybrid. Crisp flesh.

WATERMELON LARGE H	ybrid		M=1	,000 seeds				
Priced per package								
Price per 1,000 seeds (M)		1M	5M	10M*				
46041 Estrella	45.95	118.55	113.55	108.55				
46030 Sangria	48.35	124.70	119.70	114.70				
	*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 fi	Il orders for the	ese 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	45.00	115.30	114.30	113.30
* Multiple packages may be used to fil	l orders for the	ese quantities.		

DOCUMENTS REQUIREDVarious 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.





















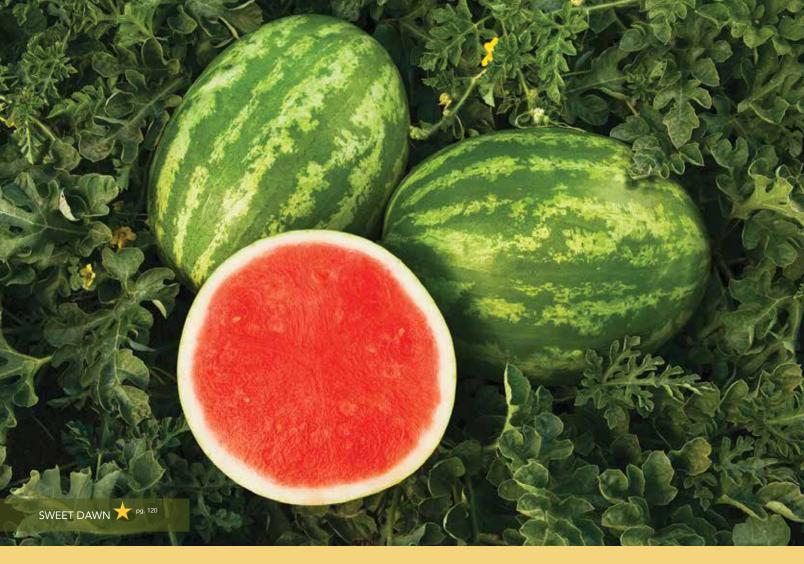












WATERMELON SEEDLESS

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 pollenizer 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 pollenizer, then direct seeding should be delayed a week to ten days. The diploid icebox pollenizer 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 pollenizer 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 pollenizers result in high early yields; standard varieties used as pollenizers 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 pollenizer variety to the seedless variety (seedless watermelons do not produce pollen). The pollenizer 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





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% January 5% February 4% March 3% April2%





MELODY

ORANGE CRISP

WA	TERM	ELON	TRII	PLOID				Pricing on page 121
		•	Days	Shape	Weight pounds	Rind Type	Flesh Color	Features
	46093	Amarillo 139	82	Globe	13 - 15	Tiger Stripe	Yellow	A Syngenta melon with deep yellow flesh and less tendency to hollow heart.
	46001	Bold Ruler 139	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 139	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 139	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 163	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.
NEW	46100	Jet Ski 139	78	Oblong	14-16	Mottle Stripe	Dark Red	Jet Ski is an early, 45 count, mottle stripe watermelon with high average degrees brix and has shown excellent quality with deep red interior color.
	46026	Joy Ride 139	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 139	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 139	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 --->.

















SWEET DAWN

SWEET GEM

YELLOW **BUTTERCUP**

			SIF	(I

WATERMELON TRIPLOID Hybrid					Pricing on page 121	
•	Days	Shape	Weight pounds	Rind Type	Flesh Color	Features
46102 Sweet Dawn 139	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 139	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.
NEW 46039 Tailgate 139	83	Oblong	17-21	Dark mottle stripe	Dark Red	Adaptable across regions with excellent quality. Expect a vigorous plant with good vine coverage and great flesh firmness with high average Degrees Brix potential.
NEW 46153 Virtue 139	85	Oval	16 - 20	Medium Green Background / Dark Green Stripes	Bright red	Virtue has shown strong early season performance while producing good yields and taste.
46021 Yellow Buttercup 139	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 139	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 (b) 139		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 139		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.



DOCUMENTS REQUIREDVarious 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

GROWER PREFERRED ALL-STARS

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

El Capitan has an attractive rind that features wide, dark green stripes. Growers say that it produces good yields, has extended holding ability, and has excellent flavor. Whether you're a shipper or a farm market, you will want to add El Capitan to your farm.

WATERMELON

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.

Phil Ramsey Vegetable Consultant

WATERMELON TRIPLOI		M=1,0	000 seeds		
Priced per package	100 Seeds	500 Seeds			
Price per 1,000 seeds (M)			1M	5M	10M*
46093 Amarillo Yellow	70.60	282.35	482.60	475.10	470.10
46001 Bold Ruler	37.25	148.90	254.45	246.95	241.95
46049 Dark Knight	77.25	308.95	528.05	520.55	515.55
46052 El Capitan	50.55	202.05	345.35	337.85	332.85
46140 Fascination	61.35	245.35	419.35	411.85	406.85
46100 Jet Ski F400	42.15	168.60	288.15	280.65	275.65
46026 Joy Ride	48.50	194.00	331.55	324.05	319.05
46134 Melody	60.70	242.75	414.95	407.45	402.45
46007 Orange Crisp	54.20	216.75	370.50	363.00	358.00
46102 Sweet Dawn	63.40	253.50	433.30	425.80	420.80
46008 Sweet Gem	75.75	303.00	517.90	510.40	505.40
46039 Tailgate F400	49.80	199.15	340.40	332.90	327.90
46153 Virtue	64.00	256.00	437.55	430.05	425.05
46021 Yellow Buttercup	66.00	263.85	451.00	443.50	438.50

WATERMELON TRIPLOIL		M=1,0	000 seeds				
Priced per package	100 Seeds	500 Seeds					
Price per 1,000 seeds (M)			1M	5M	10M*		
Personal Size							
46045 Sirius	49.60	198.35	339.00	331.50	326.50		
Pollenizers							
46103 Ace Plus F300	35.35	141.40	241.65	234.15	229.15		
46109 Wild Card Plus F300	38.55	154.15	263.45	255.95	250.95		
* Multiple packages may be used to f	* Multiple packages may be used to fill orders for these quantities.						









































RUPP KNIT HAT

RUPP HOODIE

RUPP CAMO CAP

RUPP KHAKI & BLACK CAP

RUPP CLOTH	ING		
	•	Regular 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.
	Please allow 3-4 weeks for delivery on clo	thing.	

RUPP CLOTHING	RECC	RECOMMENDED SIZE CHART								
	xs	S	М	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**	Χ	S	М	L	1	2	3	4	5	6
** I Ise item number plus size code Add a 'T' to the end for tall sizes										

CL	.01	HI	Ν	G

Size	xs	S	М	L	XL	2XL	3XL	4XL	5XL	6XL
Size codes	х	s	М	L	1	2	3	4	5	6
PJKT.SWT.HD Rupp Hoodie Sweatshirt		39.40	39.40	39.40	39.40	42.00	42.00			
PHAT.KNIT.1 Rupp Knit Hat	15.75									
PHAT.SOLID.G3 Rupp Camouflage Cap	15.00									
PHAT.SOLID.G7 Rupp Red & Gray Cap	15.00									
PHAT.MESH.G5 Rupp Khaki & Black Mesh cap	15.00									
Prices include shipping. Allow 3-4 weeks for										
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	Вох
VPOS.PACKET.1Z 1 oz seed j	63.00	
VPOS.PACKET.4Z 4 oz seed p	84.00	
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 limited supply of hi	ank nlatec

Give us a call about your planter plate needs. We have a limited supply of blank plates available for you to make your own cells for those hard to fit seeds.



B



























PLANTING (GUIDE								
•		Seeding Rate	i		Seed or Plant	Spacing			
	Seeds per Pound	per Acre by Weight	per Acre in 1000s	Seeds per 1000 foot of Row	In Row	Between Rows	Depth	Recommended Soil Temperature	Days to Germination
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"	.35"	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"	.35"	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"	.35"	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"	.25"	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"	.255"	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"	.255"	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"	.35"	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"	.35"	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 Twin row on plastic	64,000 - 76,000	2.2 - 2.6 oz	9.1 - 12.1 M	500 - 667	18 - 24"	12"	.35"	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"	.58"	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"	.575"	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"	.575"	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"	.255"	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

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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% <mark>(6 d)</mark>	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% <mark>(7 d)</mark>	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% <mark>(6 d)</mark>	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% <mark>(4 d)</mark>	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% <mark>(4 d)</mark>	91% (4 d)	88% (3 d)	10
Tomatoes	0	0	82% (43 d)	98% (14 d)	98% (8 d)	97% <mark>(6 d)</mark>	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.



THE IMPORTANCE OF SOIL TESTING

Soil testing is an essential part of growing healthy vegetables. A soil test can provide information about the nutrient levels and pH of your soil. This can help determine what amendments are needed to create optimal growing conditions.

Soil testing is important for a number of reasons. First, it helps to ensure that your plants are getting the needed nutrients and in the correct amounts. Different plants require different nutrients in different amounts. It's important to know what nutrients are available in your soil so you can supplement the soil accordingly.

Second, testing can help identify any potential concerns with your soil. For example, a soil test could reveal problems with your soil's pH, salinity, or detect other concerns that could impact plant growth. By identifying these problems early on, you can take action to give your vegetables the best opportunity to thrive.

Third, soil testing can help to improve the quality of your vegetables. Plants that are grown in nutrient-rich soil are more likely to be healthy and productive. Healthy plants are also more resistant to pests and diseases.

To test your vegetable soil, collect a sample from your field and submit it to a local county extension office or a private soil testing laboratory. It is our recommendation that you do not use a home test as the results may not be as thorough as a soil test sent to the extension office or private laboratory.

Once you have your soil test results, use them to develop a fertilization plan for your vegetables. Your local county extension office may be able to help with this.

www.ruppseeds.com/PSUSoil

Penn State University offers soil test recommendations

































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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 Audit

House Packing Facility, Storage and Transportation

Various Seeds

June J. But From

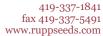
Audit ID: 42525

9/27/2022

Chief, Audit Services Branch

Audits are valid for one year from date on certificate. To verify continued adherence to the program, please visit www.ams.usda.gov/gapghp







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 ensures 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, 2023

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, and ACH. Open account terms and financing are available for qualifying customers. Cash discounts are available for select payment methods and products.

Credit Card

We accept the following credit cards: 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 the check*), 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.

ACH/Electronic Check

We accept payments via ACH deposit into our checking account, which are eligible for cash discounts. Refer to the Cash Discount Program for information. Please contact our office for details.

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, submitted for review, and approved by our credit department. Please allow several weeks to process.

Payments on open account invoices are eligible for cash 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 timely payment of your seed order or invoice.

Savings are automatically applied, and total savings are based on the amount paid and the postmark date on your envelope. Cash discounts are available for orders over \$350.00.

Cash Discounts! on 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%	April2.0%
December 6.0%	

Our cash discount program can be applied in the following situations:

- A) Prepay on account Make a payment on your account as prepayment for your expected purchases in the coming season.
 - a) To calculate the value of a prepayment, divide the amount of the payment by the difference between 100% (1) and the discount percentage for the month of your payment. Using November 7% as an example, a \$1,000 payment is divided by .93 and the total purchase value of that payment is \$1,075.27.
- B) Pay with order After you prepare and total your order, simply calculate and subtract the discount amount based on the month of payment and send a check for the balance.
- C) Pay upon receipt of order acknowledgment You can also receive a cash discount for a payment made 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 clothing, accessories, planter plates, popping corn, supplies, freight charges, etc.

Payment discounts are not available on orders less than \$350 or for credit card, debit card, and COD.

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 prorate 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.

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.



***** Canadian **Vegetable Order Form**

Online Orders: www.ruppseeds.com

Phone Orders: 1-800-700-1199 | FAX Orders: 419-337-5491

_	_			GST Number						
		\square Yes, I am a fi	irst-time customer	Technology Li	cense Number					
Account Numbe	r			Requested Shi	ip Date					
Customer Name				Ship To						
Billing Address				Address (Physical Address - no PO Boxes)						
City				City						
Province		Postal Code		Province			Postal Code	2		
Email Address				Office/Home Phone						
☐ I have a new	mailing address. (List o	d address on the back of the	order form.)	Mobile Phone						
PAYMENT M Debit Card Credit Card Discover, Maste		Account Number				Expira [tion Date Month Year		3-digit tion code	
☐ Check # ☐ Money Order		Name on card (please pri	nt)							
Credit Cards, Debit Deere Financial pa eligible for cash di	t Cards and John syments are not	Card Billing Address								
					Sorry,	no retur	ns — please only o	rder the seed you	u need.	
Item No.	Variety I	Description / Kind	Quantity	Package Size	Price per Price per		Price per package	Extended Pi	rice	
13007	Walker Deluxe		2	100 seed			13 70	27	40	
			When priced p	per package (qu	antity x packa	ge price,) = extended price.		:	
02126	Ambrosia / Corr	1	2	5#	18	00		180	00	
03235	Octane / Corn	14/1	1	2.5M		95		32	38	
		When pric	sed per LB or M (qua	antity x packag	e size) x price p	er LB/IV	l = extended price.			
									:	
		ance, if you need 6 pounds of		on (iscounts! orders	3	Total (Above)			
1 '	o orger one - 1 poung p e sizes will be at differe	oackage and one - 5 pound p nt price breaks.	аскаде.	over see page	\$350.00 130 for details		Total (Back)		•	
						_	Order Total			
Signature			Date				edit on Account n last statement)		•	
							Sub Total			
* To avoid ship	ping delays, please inc	lude all required waivers/do	cuments with your	order.			Cash Discount is over \$350.00)			
	. 5 , , , , ,	,	. ,		**	Shipp	ing & Handling s under \$350.00)	\$15	00	
** See the term	ns page for details on a	liscounts and shipping charg	es.			Net I	Due (US Funds)		•	

Item No.	Variety Description / Kind	Quantity	Package Size	Price per LB/ Price per M	Price per package	Extended Price
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	Carry this total forward to the	front of the o	order form.		Total (Back)	





Rupp Seeds Inc. 17919 County Road B Wauseon, Ohio 43567

Canadian Vegetable Order Form

Online Orders: www.ruppseeds.com

Phone Orders: 1-800-700-1199 | FAX Orders: 419-337-5491

_	_			GST Number						
		☐ Yes, I am a fil	rst-time customer	Technology License Number						
Account Numbe	r			Requested Shi	ip Date					
Customer Name	?			Ship To						
Billing Address				Address (Physical Address - no PO Boxes)						
City				City						
Province		Postal Code		Province Postal Code						
Email Address				Office/Home Phone						
☐ I have a new	mailing address. (List o	old address on the back of the	order form.)	Mobile Phone						
PAYMENT M	ETHOD:	Account Number								
☐ Debit Card				- .		piration Date				
☐ Credit Card Discover, Maste	ercard, Visa					Month Year	3-digit verification code			
Check #		Name on card (please prir	nt)							
☐ Money Order Credit Cards, Debi		Card Billing Address								
Deere Financial po eligible for cash di	ayments are not	Signature								
					Sorry, no re	turns — please only o	rder the seed you need.			
Item No.	Variety	Description / Kind	Quantity	Package Size	Price per LB/ Price per M	Price per package	Extended Price			
13007	Walker Deluxe		2	100 seed		13 70	27 40			
			When priced p	per package (qu	iantity x package pr	ice) = extended price.				
02126	Ambrosia / Cor	'n	2	5#	18 00		180 00			
03235	Octane / Corn		1	2.5M	12 95		32 38			
		When price	ed per LB or M (qu	antity x packag	e size) x price per LE	B/M = extended price.				
					:					
Seed is sold by	u nackage size. For ins	tance, if you need 6 pounds of	sweet corn	Cash D	iscounts!	Total (Above)	:			
you will need t	o order one - 1 pound	package and one - 5 pound po			orders \$350.00	Total (Back)				
i nese раскаде	e sizes will be at differ	ent price breaks.		/ see page	130 for details	Order Total				
Signature			Date		Less	Credit on Account				
					(as showr	on last statement)				
					** L e	Sub Total ess Cash Discount				
* To avoid shipping delays, please include all required waivers/documents with your				order.	\$15 00					
					** Shipping & Handling (add if total is under \$350.00)					
** See the terr	ns page for details on	discounts and shipping charge	?S.		Ne	et Due (US Funds)				

Item No.	Variety Description / Kind	Quantity	Package Size	Price per LB/ Price per M	Price per package	Extended Price
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Item No.	Variety Description / Kind	Quantity	Package Size	Price per LB/ Price per M	Price per package	Extended Price
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	Carry this total forward to the	he front of the o	order form.		Total (Back)	



Item No.	Variety Description / Kind	Quantity	Package Size	Price per LB/ Price per M	Price per package	Extended Price
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				•	•	
	Carry this total forward to the	front of the c	order form.		Total (Back)	





Rupp Seeds Inc. 17919 County Road B Wauseon, Ohio 43567

Watermelon Waiver

500.700.1199

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
<u>City</u>
Province Postal Code
Phone #
Fax #
Printed Name
Title

Dunn Coods Inc



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 Name (Last, First, MI)				
Farming or "Doing Business As" (d/b/a/ Name):	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			
Address:	VOLUNTARILY ENTERING INTO THIS STEWARDSHIP AGREEMENT.			
City: State: Zip Code:				
Business Phone:County:				
E-mail Address:				
(CANADA Only) Dealer Name:	Grower Signature Date (Individual at farm level responsible for planting)			
Return Agreement using one of the following methods – please keep a copy for your records:	(individual at fairli level responsible for planting)			
·	Grower Name (Please Print Clearly)			
Mail: Rupp Seeds 17919 County Road B Wauseon, OH 43567 Email: waivers@ruppseeds.com Fax: 1-419-337-5491	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 of 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

Attributeois a trademark of a Syngenta Group Company

Syngenta Seeds, LLC P.O. Box 959, Minneapolis, MN 55440

REMEDY SWEET CORN - SUPPLEMENTAL AGREEMENT

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 SUPPLEMENTAL AGREEMENT; (2) THIS IS A LEGALLY BINDING CONTRACT; (3) YOU ARE FULLY AUTHORIZED TO ENTER INTO THIS SUPPLEMENTAL AGREEMENT;			
Grower Name (Last, First, MI)				
Farming or "Doing Business As" (d/b/a/ Name):	AND (4) YOU ARE VOLUNTARILY ENTERING INTO THIS SUPPLEMENTAL AGREEMENT			
Address:	Grower Signature Date (individual at farm level responsible for planting)			
City: State: Zip Code:	(mandadi at tariff lovel responsible for planting)			
Business Phone: County:	Grower Name (Please Print Clearly)			
E-mail Address:	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)			
Customer ID #: (Assigned by Syngenta) Technology #:(Assigned by Syngenta)				
Dealer Name: Rupp Seeds, Inc.	GRO-CORN or 1 (877) 476-2676.			
Dealer Number:(Office Use Only)	Please return the agreement back to your Dealer at:			
Dealer Phone: 419-337-1841	Fax to: 419-337-5491 Mail to: Rupp Seeds, Inc. 17919 County Road B Wauseon OH 43567			
Third Party Syngenta-Licensee:(Office Use Only)	Email: waivers@ruppseeds.com			

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 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.

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