CATALOG



PREMIUM VEGETABLE SEEDS



NOTES

PRESIDENT'S

Letter









Emerald Seed Company supplies its customers with a dependable and consistent source of high quality vegetable seeds. We offer seeds of proven open pollinated and hybrid varieties, both proprietary and public selections. This catalog describes many of our proprietary varieties and hybrids. We look forward to your inquiries on these and other varieties of vegetable seeds.

Emerald Seed Company has extensive experience and expertise in seed production and varietal development. We are especially qualified to meet your company's special needs as you provide your customers with an excellent selection of proven planting seeds. All Emerald seeds are of the highest quality and have passed a very rigorous series of quality evaluations to insure that all products exceed importers' standards.

Our business is to provide you with affordable quality vegetable seeds that meet your production criteria. We have several brands available, which are accessible upon request to help you develop a personalized marketing strategy for your area.

We look forward to helping you exceed market standards.

Sincerely,

J. Michael Dessert, Ph.D.

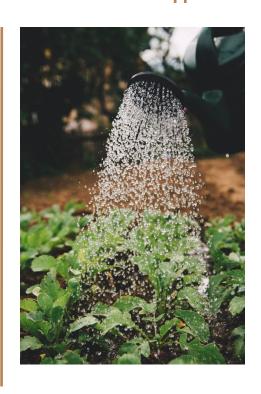
President

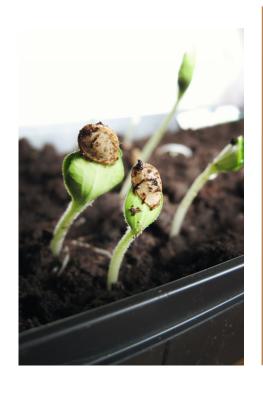
Emerald Seed Company



TABLE OF CONTENTS

Artichoke	5
Asparagus	6
Beet	7
Broccoli	8-10
Cabbage	11-12
Carrot	13-15
Cauliflower	16
Chinese Cabbage	17





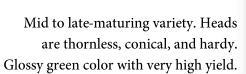
Cucumber	18-21
Melon	22-23
Onion	24-28
Bunching Onion	29
Pepper	30-31
Squash	32-33
Tomato	34-35
Watermelon	36-38

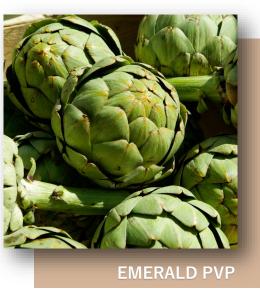




Early to mid-season maturing variety. Heads are rounded and thornless.

Plant has a very prolific, grey-green spreading foliage.





GROWING GUIDE

SET OUT TRANSPLANTS in the early spring—mid-summer.

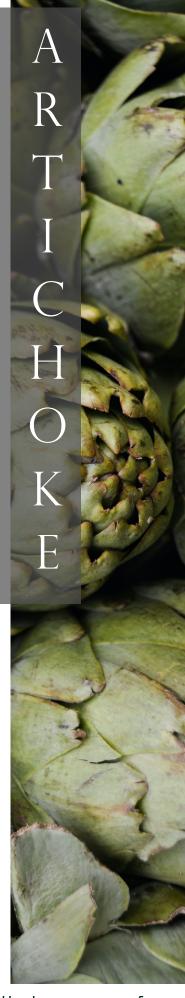
SPACING between transplants /seedlings should be approximately 4 feet or 1.20 meters.

HARVEST takes place between 5-6 months after planting.

ARTICHOKES thrive in frost-free areas with cool, foggy summers.

ONE PLANT PRODUCES about 15 to 20 artichokes a year.







VARIETY	MATURITY	SPEAR	SPEAR	FEATURES
Brock Imperial	Early Spring Harvest	2 cm	25 cm	Excellent hybrid fresh market variety for warm-dry conditions. Very uniform spears
UC 157 F-2 Hyb	Early Spring Harvest	2 cm	25 cm	Deep green, smooth cylindrical spears, tight heads and spear tip with uniform production. Vigorous growth habit.
UC 157 F-1 Hyb	Early Spring Harvest	2 cm	25 cm	Most widely adapted F-1 Hybrid. Deep green, smooth cylindrical spears, tight heads and spear tip with uniform production. Vigorous growth



Asparagus (Asparagus officinalis) is a hardy perennial suited to USDA zones 2-8 and is native to Western Europe. This perennial can remain viable for 10-20 years, so choose your field site carefully. Asparagus needs a soil pH of between 7.0 and 7.2 in fertile, well-draining soil.



		ТОР	ТОР	ROOT	ROOT	
VARIETY	MATURITY*	HEIGHT	COLOR	COLOR	SHAPE	FEATURES
Prestige	52	30-35 cm	Bright green	Dark Red	Globe to round with refined tap root.	Tolerant to Downy Mildey and Cercospora Leaf Sport. Good bolt resistance, ideal for pro- cessing, smooth roots.
Sterling	52	35-40 cm	Bright Green	Dark Red	Round	Tolerant to Downy Mildew and Cercospora Leaf Spot. Bolt resistance, erect tops, high sugar content.
Royal	55	35-40 cm	Green with maroon tinge	Dark Red	Uniform globe	Tolerant to Downey Mildew, bolt tolerant, fine crown, improved Detroit Dark Red class.
Red Express	58	35-40 cm	Bright Green	Dark Red	Globe with small tap- root	Downy Mildey tolerant, high resistance to bolting and Cercospora Leaf Spot. Well attached tops.



PLANTING TIPS

Beets are frosttolerant and grow best in the cool temperatures of spring and fall, or winter in mild climates.

Harvest when roots are anywhere from 1"-3" or 4" in diameter depending on variety. Do not let them get too big; the smaller they are, the more tender.

Beet greens are even more nutritious than the roots.



Excellent beet with smooth roots and good bolting resistance. Root is slightly flatter than Royal. Ideal for processing and fresh market.

High quality globe shaped beet with smooth roots and dark internal color. Plants are medium tall with glossy green tops.









			HEAD	BEAD	
VARIETY	MATURITY*	COLOR	SHAPE	SIZE	FEATURES
Royal Max	ME	Dark green	Semi-dome	Mid-small	Widely adapted, including for spring planting and warm, humid, summer harvest. Strong foliage. Best for bunching.
Sonora	Е	Blue-green	Dome	Small	Excellent for mid-summer plantings; early maturity with good heat tolerance at early growth stage. Very uniform. For crown and bunching.
Campina	M	Blue-green	Dome	Medium small	Widely adapted, even under increasingly warm conditions and summer harvest. Dark blue-green, attractive dome. Excellent for fresh market.
Haiyan	ML	Blue-green	High dome	Very small	Very widely adapted and stable dome shape, great for crown production and ideal for processing.
Kinsman	M	Dark green	High dome	Very small	Adapted to all basic harvesting seasons. Maintains high-dome shape. Tolerant to extreme high or low temperatures. For direct seeding or transplanting. Fresh harvesting such as crown or bunching. Compact plant.
Roxanne	ML	Blue-green	High dome	Very small	Very widely adapted all year, including spring planting for summer harvest. Humid or dry heat tolerant. For crowns, bunching, or processing.
EMBR 924	M	Super dark green	High dome	Small	Can take narrow spacing between plants, providing good yield, even with very high population per acre. Stable dome shape. Can withstand extreme high and low temperatures. Best for fresh market.
EMBR 934	M	Dark green	Dome	Small	Warm season adaptation for warm- humid conditions. Vigorous upright foliage. For spring, summer, and fall
EMBR 958	ML	Super dark green	Very high dome	Very small	Widely adapted for year round production. Very attractive, dark green heads for crowns and processing. Great for Mexico and Guatemala. Very good production under wetter, warmer conditions.



VARIETY	MATURITY*	COLOR	HEAD SHAPE	BEAD SIZE	FEATURES
EMBR 953	ML	Super dark green	High dome	Very small	Year-round production for California coastal regions. Widely adapted with vey stable shape, dark green heads. Crown, bunching, and processing.
		Tenderille	e / Multiple Bra	nching Varieti	es
Royal Tenderette	М	Medium green	Multiple heads	Medium	Multiple stem hybrid for baby broccoli production. Smaller plant allows denser production. Great sweet flavor.
Classic Tenderette	М	Dark Green	Multiple heads	Medium	Highly branching hybrid for production of baby broccoli. Approximately 80 days to maturity.

^{*}Maturity: E= Early | ME = Mid-Early | M= Mid | ML= Mid-Late | L= Late

NEED SOMETHING DIFFERENT?

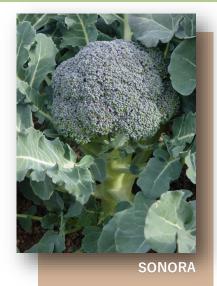


Try our new sweet baby broccoli hybrid:

ROYAL TENDERETTE

This versatile variety has gained popularity around the world for its tender and sweet edible stem.

Baby broccoli is also rich in Vitamin C, providing close to 100% of the recommended daily requirement.



Very widely adapted all year, including spring planting for summer harvest. Humid or dry heat tolerant. For crowns, bunching, or processing. Excellent for Mexico.

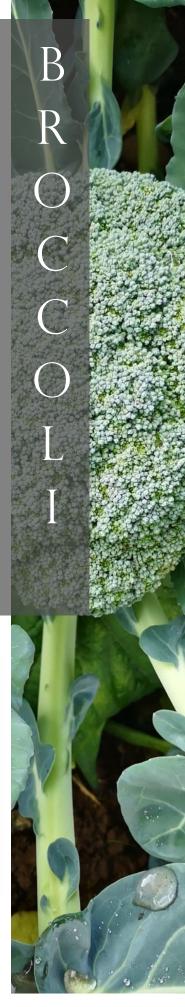


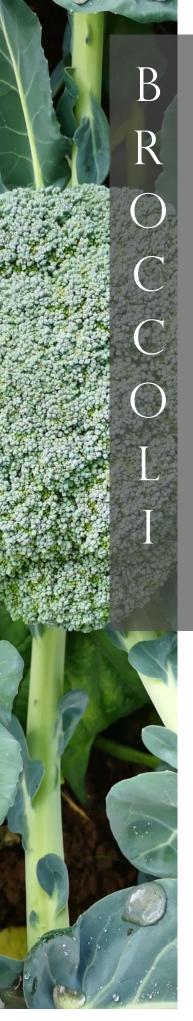
Excellent for mid-summer plantings;

early maturity with good heat tolerance at early growth stage. Very uniform. For crown and bunching.

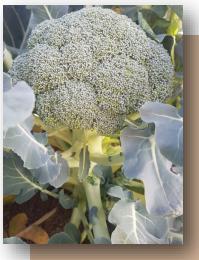








Our broccoli breeding program has quickly become one of our strongest, consistently delivering SUPERIOR varieties for you.



CAMPINA F1

Widely adapted, even under increasingly warm conditions and summer harvest. Dark bluegreen, attractive dome.



HAIYAN F1

Very widely adapted and stable dome shape, great for crown production and processing.



KINSMAN F1

Adapted to all basic harvesting seasons. Tolerant to extreme high or low temperatures. For direct seeding or transplanting. Fresh harvesting such as crown or bunching.



ROYAL MAX F1

Widely adapted, including for spring planting and warm, humid, summer harvest. Strong foliage. Best for bunching.



VARIETY	MATURITY (DAYS)	SHAPE	COLOR	SIZE (KG)	FEATURES
Veloz	50	Round	Med. Green	0.8-1.2	First to market, full round, firm, short core, very attractive.
EMBG 7145	55	Round	Dark Blue- green	1.4-3.0	Early full-round. Compact, dense heads with very short core. Smooth, small frame, excellent holding.
EMBG 7142	60	Round	Light Blue- green	1.6-1.8	Full round, medium frame, strong field holding capacity.
Vista	60	Round	Blue-green	2.2-3.5	Round, with solid and short core. Medium holding.
EMBG 8140	60	Round	Blue-green	2.2-2.5	Full round, firm, very short core. Good field holding, very sweet. Black- rot tolerant and Fusarium resistant.
EMBG 8117	65	High Round	Blue-green	1.6-1.8	Full, tall round. Handsome frame with excellent flavor.
Valverde	65	Large deep flat	Blue-green	2.0-2.5	Large, mid-season deep flat. Large, strong frame, good holding ability.
EMBG 8143	65	Round	Blue-green	1.8-2.0	Attractive, very firm, very short core.
EMBG 7141	70	Round	Blue-green	1.8-2.0	Short core, medium frame, strong holding ability.
EMBG 2133	70	Round	Blue-green	1.5-2.5	Very attractive, full round variety with very short core. Holds very well, sweet flavor.
EMBG 2132	70	Round	Blue-green	1.8-2.5	Very solid frame, short core, very late bursting.
Venture	70	Round	Light Blue- green	1.8-2.0	Very attractive, short core, late bursting. black rot tolerant and Fusarium resistant.
Perla Roja	70	Round	Red	1.6-1.8	Full round, dark red, very firm, medium core, excellent field holding, medium large frame.
Vantar	70	Slightly flattened	Blue-green	1.8-2.2	Short core, late bursting, widely adapted, black rot tolerant and Fusarium resistant.
Savoy EMXS 2115	70	Round	Bright Green	1.8-2.2	Bright green savoy variety with yellow tinted interior, mid-season maturity. Very good field holding.
EMG 8113	75	Deep Flat	Med. Green	2.2-2.6	Large variety with great field holding ability. Mid-season maturity.
Crimson Emerald	75	Round	Red	1.8-2.2	Full round, very solid, dark red, medium core, very late bursting.
Stratus	80	Round	Blue-green	2.0-2.5	Very solid, full round heads with short cores. Mid-season variety.







/ELOZ

Medium green color. First to market, full round, firm, short core, very attractive.



CTDATH

Very solid, full-round heads with short cores., mid-season variety.



CRIMSON EMERALD

Full Round, very solid, dark red, medium core, very late bursting, medium-late maturity.



SAVOY EMX 2115

Bright green savoy variety with yellow tinted interior, mid-season maturity. Very good field holding.



VISTA

Round, with solid and short core. Medium holding. One of our largest varieties, reaching up to 2.60 kg in weight.



PERLA ROJA

Full round, dark red, very firm, medium core, excellent field holding, medium large frame.



	DAYS TO	ROOT	ROOT	
VARIETY	MATURITY	LENGTH	SHOULDER	FEATURES
Brandy 421	105	18-22 cm	3-4 cm	Year round production capabilities and cylindrical, well filled roots. Very good cold and bolting tolerance. Structure is firm and hard to break. Foliage is medium long, erect, and tolerant to diseases.
EMN 515	112	20-22 cm	4-5 cm	Larger Nantes with very smooth finish; cylindrical; very uniform with consistent blunt tip. Uniform production, excellent for Middle East, Turkey, and South America, Strong Tops with good foliar resistance.
EMN 520	105	18-20 cm	3-4.5 cm	Very heavy strong roots, excellent for Mexican market. Strong tops with good foliar resistance.
EMN 532	105	18-20 cm	4-5 cm	Heavy blocky Nantes for South America. Very uniform production of strong cylindrical roots with excellent orange interiors. Resistant tops.
Norlinda	105	18-22 cm	3.5-4.5 cm	Refined variety, blunt roots, relatively early for classic Nantes production. Roots are strong and resist breakage. Highly recommended for Mexico.
EMN 593	105	18-22 cm	2.5-3.5 cm	Very refined, highly cylindrical, strong blunt tip and tops. Very attractive exterior and internal dark orange color. Uniform production allowing high marketable yields.
EMN 614	105	18-20 cm	3-4 cm	Very attractive smooth Nantes, good blunt tip. Recommended for Turkey, Middle East, South America. Very smooth with excellent exterior and interior color.
EMNK 548	100	17-19 cm	3-4 cm	Very attractive, dark orange Nantes x Kuroda hybrid for Mexico and South America. Early production with medium taper. Excellent interior color.
Kuroda 710	95	17-18 cm	4-4.5 cm	Kuroda class,. The foliage is dark green in color, very strong and reaches 19 to 22 inches in height. Roots are very uniform in color, shape, and size.





Sow direct into soil in spring. Make a second sowing for a fall crop in mid to late summer.

It is very important to thin carrots so they don't compete for available nutrients, moisture, and light.









NORLINDA
Refined hybrid with blunt
roots. Relatively early for
classic Nantes production.
Resists breakage. Highly recommended for Mexico.



Recommended for Turkey, Middle East, South America. Very smooth with excellent exterior and interior color.



EMNK 548 Nantes x Kuroda hybrid for Mexico and South America. Early production with medium taper. Excellent interior color.



EMN 515
Larger Nantes with very
smooth finish. Uniform production, excellent for Middle
East, Turkey, and South
America.



Very heavy strong roots, excellent for Mexican market. Strong tops with good foliar resistance.



Heavy blocky Nantes for South America. Very uniform production of strong cylindrical roots with excellent orange interiors. Resistant tops.



Carrots dislike transplanting. For optimal yields, direct plant seed 1/2" deep, in rows spaced 16 to 30 inches apart.



	DAYS TO	ROOT	ROOT	
VARIETY	MATURITY	LENGTH	SHOULDER	FEATURES
Emerald Supreme	105	15-18 cm	4-5 cm	Smooth skin and good color. Small core, high tolerance to Alternaria spp. Foliage 30 cm high.
EMC 559	110	16-18 cm	3.5-4.5 cm	Chantenay hybrid for winter, spring plant, with strong tops. Bright dark orange color with very little shoulder darkening. Very uniform production of slightly tapered roots with rounded tips.
EMC 584	110	16-18 cm	3-4 cm	Classic Long Chantenay hybrid. Nearly cylindrical, no green shoulder, strong attachment.

EMERALD SUPREME F1





EMC 559 F1



'Chantenay' carrots are shorter than other classes of carrot —from five to seven inches long— so you have more places to plant them than you would if you were growing longer varieties like 'Nantes' or 'Imperator.'

They require a soil depth of seven inches or so, not the 10 to 12 inches minimum that others demand.

That means you could plant 'Chantenay' in raised beds, even those that are lined with plastic or another material, as long as they'll have six to eight inches of soil available to set down roots.





VARIETY	DAYS TO MATURITY*	FEATURES
EMCF 918	60	Good production in warmer, humid conditions.
Sateen 914	70	Mid-early maturity, good field holding, for cooler production areas, good tolerance to downy mildew.
Stela 944	75	Excellent head and curd quality, compact plant, good head cover.
EMCF 911	80	Very good self wrapping, deep domed head, good production in humid production areas.
Estrella 933	80	Early hybrid for summer and fall harvest. Its attractive heads are uniform, large, and dense with a pure white color. Plant provides excellent wrapper leaves for head protection. Widely adapted with good heat tolerance.
EMCF 966	85	Early to mid-season, best for late summer and fall harvest. Excellent head protection. Deep domed head, dense and very white. For fresh market or processing.
EMCF 977	90	Mid-season variety, excellent hybrid for overwintering in production zones with mild winters. An early hybrid with very white, large heads.

^{*}From transplant











When planting, keep a distance of 45-60 cm between plants, and 60-90 cm between rows.

You will need approximately 300 gm of seed per hectare if transplanting, or 0.5-1.2 kg if direct sowing.

It is best to start cauliflower from small nursery plants versus direct sowing.



		HEAD	DISEASE	
VARIETY	MATURITY	WEIGHT	RESISTANCE	FEATURES
Emerald Orient	65 days	3.0-3.5 kg	Downy Mildew, Soft Rot	Excellent shipper, very slow bolting. Head is uniform and well wrapped. Heavy yielding. Plant habit is upright.
Emerald Spring	55-60 days	2.7-3.3 kg	Downy Mildew	Napa class, matures quite early, in time for spring and summer. It is slow bolting with excellent shipping ability. Very firm head
EM Napa 823	65 days	3.0-3.5 kg	Downy Mildew	Napa class, mid-early variety with strong bolting resistance. Excellent for cool highland zones and overwinter in temperate production zones.



PLANTING TIPS

Chinese Cabbage has approximately 300 seeds per gram. When sowing, plant seeds at 50-60 cm spacing between rows and 40-45 cm within rows.

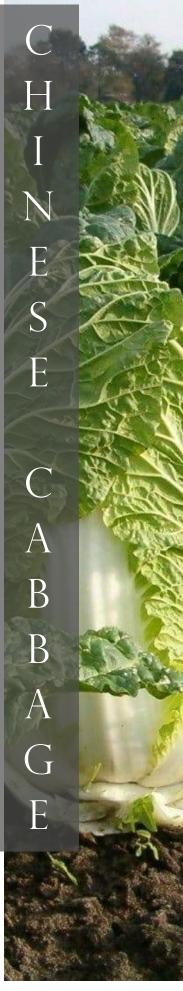
Chinese cabbage is a cool-weather plant that will bolt and go to seed quickly in warm weather and long days; grow Chinese cabbage in spring or autumn in temperatures ranging from 45° to 75°F (7-24°C).

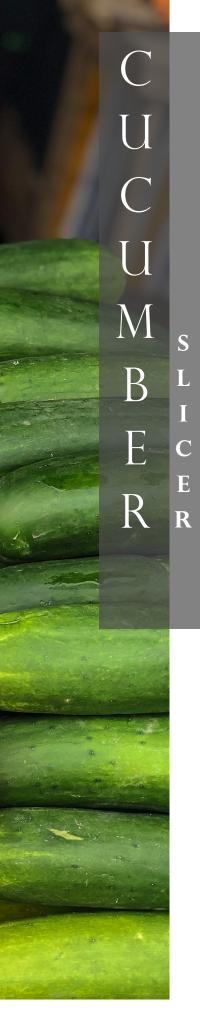












VARIETY	MATURITY (D.S.)*	FLOWER	FRUIT SIZE (CM)	DISEASE RES.	FEATURES
Lancer 152	50-55	GY	21-23 x 6	CMV, S, DM, PM, ALS, WMV, ZYMV	Excellent plant cover and very productive. Cylindrical. Multiple disease resistance. For open field production.
Laser 160	60	GY	23-25 x 6	CMV, S, DM, A, ALS	Excellent fruit quality, very smooth skin. Small seed cavity, multiple disease resistance. For open field production.
EMGS 180	50-55	GY	22-24 x 6	Ccu, PSRV, WMV, PM	Very early parthenocarpic slicer for net houses.
EMGS 175	50-55	GY	21-23 x 6	Ccu, PM, CMV, WMV, ZYMV	Very uniform, exceptional fruit and yield. Fruit is dark green and very smooth. Bes for staked, open field production.
EMGS 177	50-55	GY	20-22 x 6	SQMV, PM, CMV WMV, ZYMV	Produces high percentage of super select grade fruit. Very smooth, dark green, attractive skin. Best for staked, open field production.
Emerald Choice	58-60	GY	20 x 6	CMV, S, PM, A, ALS	Extremely productive, open field variety, cylindrical shape with slight taper on both ends. Compare to Dasher II.
Torneo 143	50-55	МО	23 x 6	CMV, S, DM, A, ALS, WMV, ZYMV	Full season variety with great plant cover. High yielding. Multiple disease resistance. Open field.

*D.S. = Direct Seeding *GY = Gynoecious, predominantly female

 ${\bf *MO} = Monoecious$









	MATURITY	FLOWER	FRUIT	DISEASE	
VARIETY	(D.S.)*	HABIT*	SIZE (CM)	RES.	FEATURES
EMBA 75	55-60	PF	12-14 x 3.5	CMV, DM, PM	Suitable for open field production, excellent quality, very high yielder. Skin is smooth. High percentage of female flowers. Compare to Babylon.
EMBA 300	60	МО	13-15 x 3.5	CMV, DM, PM	Hybrid for cool season, open field production. Monoecious, long season production, dark green skin.
EMBA 325	55-60	GY	13-15 x 3.5	CMV, MMV, PM, DM	High yield with fresh and crisp fruit. Uniform length and excellent plant vigor.
EMBA 327	55-60	PF	13-15 x 3.5	Ccu, ZYMV, PSRV	Early, open field production with long harvest season. Beautiful, dark green, cylindrical fruit.
EMBA 329	55-60	PF	13-15 x 3.5	CMV, MMV, PM, DM	Early, open field Beit Alpha with long season production of beautiful, dark green fruit.
EMBA 453	55-60	GY	13-15 X 3.5	ZYMV, PSRV	Very attractive parthenocarpic Beit Alpha for outdoor or tunnels.
EMBA 471	55-60	GY	13-15 x 3.5	ZYMV, PSRV	Parthenocarpic Beit Alpha for winter production in green houses.
EMBA 472	55	GY	13-15 x 3.5	ZYMV, PRSV	Parthenocarpic, multiple disease resistant, for plastic or greenhouse production. Warm season variety. Multiple fruits per node, very early variety.

 $\begin{tabular}{ll} *D.S. = Direct Seeding & *GY = Gynoecious \\ *PF = Predominantly Female & *MO = Monoecious \\ \end{tabular}$











				1	
	MATURITY	FLOWER	FRUIT	DISEASE	
VARIETY	(D.S.)*	HABIT	SIZE (IN)	RESIST.	FEATURES
Emiliano	50	GY	4-12 x 2-4	WMV, PRSV, Sc, ZYMV, ALS, A2, CMV, PM, DM	Excellent plant cover with, blocky, medium green, white-spined fruit. Attractive fruit for machine or hand harvest.
EM 424	55	МО	4-12 x 2-4	CMV, S, DM, PM, ALS, WMV, A, ZYMV	Plant is vigorous, producing blocky shaped fruits with dark green skin. White spined.
Action 411	55	GY	4-12 x 2-4	CMV, S, DM, PM, ALS, WMV, A, ZYMV	Blocky fruit, high yielding. Smooth, dark green, white spined.
Emerald Pick	50	GY	4-12 x 2-4	S, CMV, DM, PM, Anth, ALS	Premium, high-yielding, white spined pickling hybrid. Fruit is blocky and dark green in color.
Carolina	50-55	GY	4-12 x 2-4	S, CMV, DM, Anth, ALS, PM	Medium green, blocky variety for processing. Best for hand harvest.
Calypso	50-55	GY	4-12 x 2-4	Scab, CMV, DM, Anth, ALS, PM	Medium green, block variety. Can be machine or hand harvested.

*D.S. = Direct Seeding



Cucumber plants should be seeded or transplanted outside in the ground no earlier than 2 weeks after the last frost date. Cucumbers are extremely susceptible to frost and cold damage; the soil must be at least 70°F for germination.





EMILIANO

Excellent plant cover with dark green, white-spined fruit.



EM 424

Monoecious variety. Plant is vigorous, producing blocky shaped fruits with med-dark green skin.



CALYPSO

Attractive dark-green skin, white spines, and blocky shape.



ACTION 411

Uniform, gynoecious variety, dark green color. Multiple disease resistance.



EMERALD PICK

Premium, high-yielding, white spined pickling hybrid. Fruit is blocky and dark green in color.



CAROLINA

Medium green, blocky variety for processing. Best for hand harvest.







		DAYS TO		WEIGHT			NOTES /
VARIETY	CLASS	MATURITY	SHAPE	(KG)	EXTERIOR	FLESH	RESISTANCE
Del Oro	Western Shipper	75-80	Round	2.5-3.0	Tan, full net, no sutures	Orange	PM, F-0, F-1, F-2, Sulfur
Edisto Star	Western Shipper	80-85	Round	2.5-2.8	Tan, full net	Orange	PM, Sulfur
EM 9644	Eastern Shipper	75-80 Very Early	Oval	2.5-30	Tan, coarse net, slight suture	Orange	PM, Fusarium
Capital (EM 616)	Harper	85 Mid-season	Round	2.0-2.5	Tan, full net	Deep Orange, crispy	PM, Fusarium. Excellent set
EMA 19306	Ananas OF	90	Med-Oval	3.0	Yellow- orange	Orange	PM, Fusarium. Tight seed cavity
EMA 8603	Ananas OF	80 Mid-early	Long Oval	2.5	Fine netting	Orange	PM, Fusarium
EMA 8604	Ananas OF	75-80 Early	Long Oval	2.5	Fine netting	Orange	PM, Fusarium. Large yields.
EMG 870	Galia	75 Very early	Round	1.5-2.0	Yellow- orange	Green	PM, Fusarium. Excellent quality
EMG 1215	Galia	80-85 Mid-late	Round	2.5	Smooth net	Green	PM, Fusarium
Precious Dew	Honey Dew	80-85 Mid-late	Round (7x7")	2.5	Creamy white / smooth	Green to white	РМ
EMHD 9002	Honey Dew	85 Mid-late	Round (7.5x7.5")	3.0	Creamy white / smooth	Green to white	PM. Fusarium
Jaune Coronel	Yellow Canary	80 Mid-early	Oval (7x6")	2.0	Yellow, me- dium wrinkle	White, very sweet	PM, Fusarium, Sulfur
EMYC 9501	Yellow Canary	80-85 Mid-late	Large Oval (11x7")	3.0	Yellow, heavy wrinkle	White	PM, Fusarium.
EMYC 824	Yellow Canary	80-85 Mid-late	Medium Oval (8x6")	2.5	Yellow, slight wrinkle	White	PM, Fusarium. Sweet, creamy flesh.





Medium-early Western Shipper class. Orange flesh color, full round. Tolerant to sulfur application, powdery mildew and fusarium.



An early, highly productive, Galia class hybrid with excellent quality.



Excellent orange-flesh Ananas with tight seed cavity. Flesh is aromatic and sweet. Mid-season maturity, great holding ability.



Large Honey Dew with green to white exterior. Widely adapted with good vine vigor.



Beautiful Yellow Canary melon. Golden yellow, medium wrinkled skin, strong vine, large yields.



Harper class melon with improved flavor, creamy well netted exterior, and deep orange, crisp flesh.

PLANTING TIP



You will need approximately 7 gm of melon seed per 30 meter row, and 454 gm (1 lb) of seed per acre.

The average yield per 30 meter row are 100 fruits or 6,800 kg per acre.



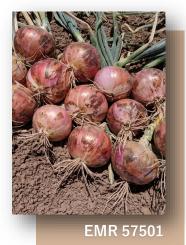


		DAY			DISEASE	
VARIETY	MATURITY	LENGTH	SHAPE	BULB	RES.	FEATURES
Inkopah	Mid-season	Short Day	Round	Jumbo, dark red	PRR	Excellent variety that produces deep red, full round bulbs with high percentage of single centers. High bolting resistance.
Rojo Ardante	Mid-early	Short Day	Flat Globe	Medium to jumbo, dark red	PRR	Early variety with attractive scale color and shape. Excellent uniformity and yield. Bolt resistant; great for cool tropics.
Pechanga	Early	Short Day	Full globe	Jumbo	Strong PRR	Very firm, medium red bulb, with high percentage of single centers. Vigorous, heavy production
EMR 57501	Mid-early	Short Day	Flat globe	Pink jumbo	PRR	Very firm, high yielding pink hybrid. Jumbo flat globe.
EMR 57503	Mid-season	Short Day	Full globe	Pink jumbo	PRR	Full round, very attractive pink hybrid. Very firm, large.
EMR 57162	Mid-early	Short Day	Full globe	Light red	PRR	Light red, large, near round bulb. Early production.







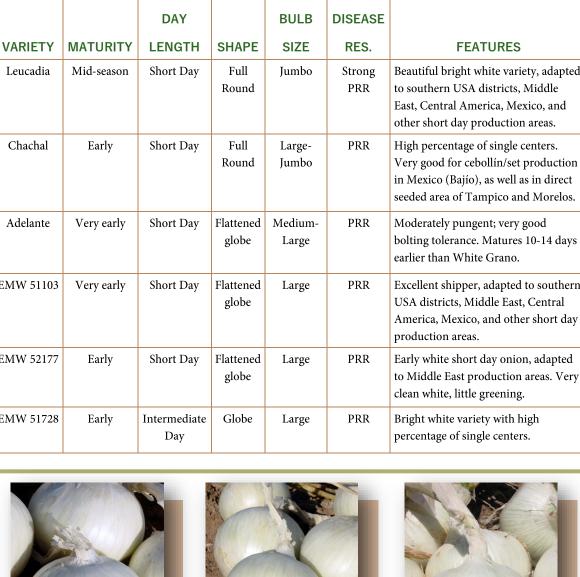








		DAY		BULB	DISEASE	
VARIETY	MATURITY	LENGTH	SHAPE	SIZE	RES.	FEATURES
Leucadia	Mid-season	Short Day	Full Round	Jumbo	Strong PRR	Beautiful bright white variety, adapted to southern USA districts, Middle East, Central America, Mexico, and other short day production areas.
Chachal	Early	Short Day	Full Round	Large- Jumbo	PRR	High percentage of single centers. Very good for cebollín/set production in Mexico (Bajío), as well as in direct seeded area of Tampico and Morelos.
Adelante	Very early	Short Day	Flattened globe	Medium- Large	PRR	Moderately pungent; very good bolting tolerance. Matures 10-14 days earlier than White Grano.
EMW 51103	Very early	Short Day	Flattened globe	Large	PRR	Excellent shipper, adapted to southern USA districts, Middle East, Central America, Mexico, and other short day production areas.
EMW 52177	Early	Short Day	Flattened globe	Large	PRR	Early white short day onion, adapted to Middle East production areas. Very clean white, little greening.
EMW 51728	Early	Intermediate Day	Globe	Large	PRR	Bright white variety with high percentage of single centers.

















		DAY		BULB	DISEASE	
VARIETY	MATURITY	LENGTH	SHAPE	SIZE	RES.	FEATURES
Fortaleza (EMY 55210)	Very early	Short Day	Globe	Large	Strong PRR	Attractive dark/golden yellow skin, highly single centered, very good bolting resistance.
Admiral	Early	Short Day	Globe	Large	PRR	Classic variety, widely adapted for early to mid-season production. Very firm, yet sweet onion.
Keepsake	Mid-early	Short Day	Globe	Large	Strong PRR	An excellent shipper with very good storage capacity. Widely adapted for early season production in short day onion districts throughout the world.
EMY 70043	Early	Short Day	Globe	Large	Strong PRR	Our workhorse, this hybrid has wide adaptability throughout short day production regions including the Middle East and South America.
EMY 70066	Very early	Short Day	Globe	Large	PRR	Firm bulb, full round globe with darker yellow scales. For mid-season planting in USA southern growing districts and semi-tropical onion production areas.
Hidalgo (EMY 72055)	Mid-early	Short Day	Globe	Large- Jumbo	PRR	Highly single centered, bolt resistant. Very uniform bulbs with deep yellow skin. Widely adapted, including Tampico & Texas.
Benito (EMY 55033)	Very early	Short Day	Flattened globe	Large- Jumbo	Very strong PRR	Mild flavor, strong roots. Excellent bolt resistance. Very attractive.
EM 110	Mid-early	Short Day	Granex	Large	Strong PRR	Classic, attractive granex class. Very good bolt tolerance and resistance to splitting.
Copada (EMY 55126)	Early	Short Day	Deep Granex	Large	Strong PRR	Early granex with deep flat to flattened globe bulbs. High percentage of single centers and good bolt tolerance. Very sweet.
Reforma (EMY 55455)	Mid-season	Short Day	Granex	Very Large	Strong PRR	Developed for the sweet granex market. Well adapted to production districts of Vidalia, South Texas, and other mild growing temperate and semi-tropical production zones. High pack-out.
EMY 52121	Mid-late	Short Day	Granex	Large	PRR	Deep flat, very firm bulbs; great long distance shipper. Plants are vigorous and bulbs refined.
EMY 55045	Mid-season	Short Day	Granex	Large	Strong PRR	Bulbs are an attractive deep flat shape, with tendency for deeper bulbs under transplanted cropping culture.
EMY 89314	Mid-season	Intermediate Day	Flattened globe	Jumbo	PRR	Low pungency variety. High percentage of single centers. Excellent choice for late season, sweet onion market.





Onions are **LATITUDE** sensitive; bulbs will only begin growing after the number of daylight hours has surpassed a minimum quantity. Short day onions will form bulbs when daylight reaches 11–12 hours; intermediate varieties need 12–13.



FORTALEZA
(EMY 55210)
Attractive dark/golden
yellow skin, highly single
centered, very good bolting
resistance.



Classic variety, widely adapted for early to midseason production. Very firm, yet sweet.



Widely adapted for early season production in short day onion districts throughout the world.



EMY 70043

Our workhorse, this hybrid has wide adaptability throughout short day production regions.



Firm bulb for mid-season planting in USA southern growing districts and semitropical onion production areas.



bulbs with deep yellow skin.







Classic, attractive granex class. Very good bolt tolerance and resistance to splitting.



Deep granex, very sweet flavor. High percentage of single centers and good bolt tolerance.



REFORMA

For sweet granex market. Well adapted for Vidalia, South Texas, and other mild onion growing zones.



Deep flat, very firm bulbs; great long distance shipper. Plants are vigorous and bulbs refined.



EMY 55045

Bulbs are an attractive deep flat shape, with tendency for deeper bulbs under transplanted cropping culture.



EMY 89314

Best for fall or early spring seeding or transplanting in intermediate production areas. Low pungency.

You will need approximately 15 gm of onion seed per 30 mt (100 ft) row, and 2-3 kg of seed per acre.

The average yield per 30 mt (100 ft) row are 45 kg (100 lb) or 17,500 kg (38,500 lb) per acre.







			DISEASE	
VARIETY	MATURITY	BULB SIZE	RES.	FEATURES
Espada Verde (EMB 100)	Early	Non-bulbing	PRR, downy mildew, smut, thrips	Winter hardy variety for bunching. Short to medium white shanks. Especially suited for areas where Tokyo Long White is grown.
Natsuyo Verde	Early	Non-bulbing	PRR, downy mildew, smut, thrips	Winter hardy variety with very erect shanks. Allium fistulosum.
EMB 995	Early	Non-bulbing	PRR	Japanese type with medium long white shank. Very vigorous; tolerates planting under high heat conditions.
EM Vaquero	Very early, short day	Med-flat (Cambray)	PRR	Short day, bright white onion. Widely adapted for fresh market bulbs. Excellent for use as Cambray spring onion for harvest and sale with green foliage.







GROWING GUIDE

PLANT SEED in the early spring—fall.

SPACING between seeds should be 1/2 inch.

GERMINATION will occur at temperatures from 46 to 86 F with the optimum at over 60 F.

HARVEST should begin when onions are 1/4 to 1/2 inch in diameter at the base.

YIELDS average 800-1,000 eleven pound cartons per acre.







			SIZE—cm		
VARIETY	CLASS	COLOR	(L x D)	PUNGENCY	FEATURES / RESISTANCE
EMA 364	Anaheim	Medium	19 x 3.75	Medium Heat	Classiest Anaheim.
		Green			TMV
EMA 395	Anaheim	Medium	20 x 3.75	Medium heat	Large, attractive variety.
		green			TSWV
EMJ 13007	Jalapeño	Dark green	11 x 3	Medium heat	Xcv 1-2
Fortunato 1109	Jalapeño	Dark green,	12 x 3.5	Very hot	No Cracking.
		glossy			Xcv 1-3
EMJ 1111	Jalapeño	Dark green	11 x 3.5	Hot	No cracking, thick walls.
					Xcv 1-2
EMJ 8092	Jalapeño	Dark green,	10 x 3	Hot	Very attractive.
		glossy			Xcv
EM 600	Habanero	Light orange	5 x 2.5	Super hot	TMV
EMSR 9405	Serrano	Medium	10 x 1.5	Very hot	Classic serrano, heavy
		green			production, robust.
EMSR 9307	Serrano	Dark green	10 x 1.5	Very hot	Darker green serrano, very firm.
EM Ancho 9604	Ancho	Shiny, dark	14 x 8	Mild	High yielding.
		green			TMV









		SIZE—cm	DISEASE	
VARIETY	CLASS	(L x D)	RESISTANCE	FEATURES
EMB 2003	Blocky Bell	12 x 12	Xcv 1-3, TSWV	Large, blocky bell, vigorous plant.
EMB 2014	Blocky Bell	10 x 10	TSWV	Mid-cycle variety, suitable for greenhouse and open field planting. Dark red maturing to deep red.
EM Bella 2032	Blocky Bell	11 x 10	Xcv, TSW, TMV, PVR4	Compact, smaller plant, for protected or open field production.
EMB 960	Blocky Bell	12 x 12	Xcv, Pc	Dark green to red. Thick walled, mostly four lobes, very large fruit.
Bella 270	Blocky Bell	11 x 10	TMV	Very large, four lobed, widely adapted.
EMB 2021	Blocky Bell	10 x 10	TMV	High-yielding compact plant. Flesh is sweet and red when ripe.
EMLB 3056	Blocky, half long bell	14 x 12	TSWV, Xcv	Very large, elongated bell; four to five lobes.
EMLB 2015	Blocky, half long bell	14 x 10-12	TSWV, TMV	Vigorous plant with mid-early cycle. For greenhouse or open field cultivation. Elongated, four lobed fruit. Dark green to red.
EML 3045	Lamuyo	18 x 10	PVY, TMV	Classic Lamuyo. Tall, vigorous plant. Thick walls, strong production.
EMN 2007	Nathalie (Tropical Lamuyo)	14 x 7	TMV	Tropical Lamuyo, vigorous growth for multiple picks.
EMN 2016	Nathalie (Tropical Lamuyo)	14 x 7	PVY	Tropical Lamuyo, vigorous growth for multiple picks.
EM Cantora	Nathalie (Tropical Bell)	10 x 7	TMV, TEV, PVY	Tropical Lamuyo, vigorous growth for multiple picks.
EMM 3001	Marconi	20 x 6	TMV	Classic Marconi. Dark green, bright red at maturity.





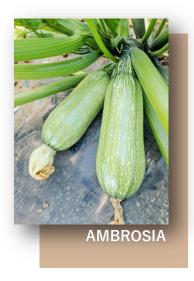


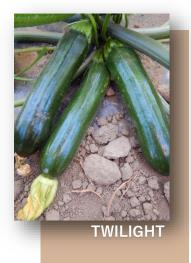




		MATURITY	SIZE	FRUIT	FRUIT	
VARIETY	CLASS	(DAYS)	(CM)	COLOR	SHAPE	FEATURES / RESISTANCE
Ambrosia	Grey zucchini	50	16-18	Mottled green / grey	Bulbous	Large, vigorous foliage; tolerant to virus.
Grey Orizaba	Grey zucchini	50	16-18	Mottled green / grey	Bulbous, slightly tapered	Uniform and productive; good foliar resistance
EM 4047	Grey zucchini	50-52	16-18	Mottled green/ grey	Bulbous, slightly tapered	Attractive grey zucchini; resistant to Podi Virus, ZYMV, WMV II
Twilight	Dark green zucchini	50-55	18-20	Dark Green	Cylindrical	ZYMV, WMV, PM
EM 4037	Dark green zucchini	50-55	18-20	Dark Green	Very cylindrical	ZYMV, PM
EMB 4050	Anita	42-46	14-16	Light, pale green; slight mottle	Bulbous	Multiple virus resistant; bulbous hybrid for Jordan & Lebanon
EMBeacon	Topkapi	51	16-18	Medium light green	Cylindrical	Attractive Clarita color, medium size bush
EM 4045	Topkapi	50-55	16-18	Light green	Cylindrical	Multiple virus resistance; large vigorous foliage
EMC 4565	Caserta	50-55	16-18	Medium light, green mottle	Cylindrical	Prolific, ZYMV resistant
EMOZ 4925	Cocozelle	55	22-32	Medium dark green, heavy stripes	Cylindrical, slightly bulbous	Large, productive plants
Bahija	Iskandarani	52	15-18	Light green	Cylindrical, slightly tapered	Podi complex, ZYMV, WMVII
Clara 620	Clarita	42-46	15-18	Light green with grey un- dertone	Bulbous, tapered	Classic Lebanese, vigorous
Tiara	Jedida	50	15-18	Light green	Cylindrical	Strong foliage
Yellowstone	Yellow Zucchini	50	18-20	Yellow	Cylindrical	PM2, ZYMV, WMVII
EMRZ 840	Round Zucchini	50-55	8 x 8	Dark Green	Round	Elegant fruit on large, productive plant
EMRZ 204	Round Zucchini	50-55	8 x 8	Medium green	Round	Attractive, medium green fruit
Super Bol (EMRZ 201)	Round Zucchini	50-55	8 x 8	Medium green/ grey	Round	Beautiful, refined, grey round zucchini
Corinta (EM 4062)	Jedida	48-52	16-18	Attractive, light green	Cylindrical	CMV, ZYMV, PRSV

























VARIETY	MATURITY (DAYS)	TYPE / PLANT HABIT	WEIGHT (GM)	SHAPE	DISEASE RESISTANCE	FEATURES
EMDR 222	Mid-early	Determinate Round	230	Round	TY, TSW	Extra firm, round, fresh market tomato with disease resistance.
EMDR 9913	Mid-early	Determinate Round	220	Round	TY, TSW	Excellent for Caribbean production.
EM Reina	Early	Determinate Saladette	130-140	Deep-egg	VFF, Bact. Spec.	Plant has good cover and produces very firm fruit.
EMDS 587	Early	Determinate Saladette	110-120	Pear- blocky	VFFN, TY, TSW	Very productive Rio Grande type. For fresh market or processing.
Meridian 586	Early	Determinate Saladette	120	Oval	VFFN Bsp	Excellent for Mexico, Brazil, Argentina and most Latin American markets.
EMDS 13003	Mid-early	Determinate Saladette	120	Deep-egg	VF3NTY	Very vigorous plant habit. Firm fruit with thick walls.
EMDS 21004	Mid-early	Determinate Saladette	120-140	Blocky oval	VF3, TY, N, ToTV, PTSWV	Widely adapted to Caribbean, Middle East,
EMDS 1355	Mid-season	Determinate Saladette	130-140	Saladette	VF3N, TY, TMV	Widely adapted variety.
EMDS 1366	Mid-season	Determinate Saladette	120-140	Saladette, oval	VFF, ToTV, TY	Highly productive in the Caribbean, Middle East, and Peru.
EM Delta 725	Mid-early	Indeterminate Saladette	130-140	Pear- blocky	V, F-1, F-2, BSP, N, TSW	Large Rio Grande type, grows in clusters, very firm fruit. Extended shelf life.
Chonto 167	Mid-early	Indeterminate Saladette	130	Saladette, long oval	TY, VF	Strong, early production of quality fruit.
EMIS 21009	Mid-season	Indeterminate Saladette	160-170	Saladette	VF3N, TY, TSW, TMV	Large fruit, multiple disease resistant.
Clara 665	Mid-season	Indeterminate Santa Clara	140	Blocky- round	V, F-1, F-2, ASC, ST	Very firm, large fruits. For open field production.



The fruit of a $\ensuremath{\mathsf{DETERMINATE}}$ to mato plant ripens all at once. Because of this trait, this type of tomato plant is useful for those who want to grow tomatoes for canning.

INDETERMINATE tomatoes continue to produce all growing season until a hard frost hits and stops them. Indeterminate plants are particularly desirable if you'd like a continuous harvest for slicing or salad tomatoes.





MERIDIAN 586

Early, determinate variety; excellent for Latin American markets.



CLARA 665

Santa Clara class. Very firm, large fruits. For open field production.



EMDS 13003

Saladette variety with very vigorous plant habit. Firm fruit with thick walls.



EM REINA

Very productive determinate saladette/Rio Grande type.



FM DFI TA 72

Large Rio Grande type, grows in clusters, very solid fruit. Extended shelf life.



EMDS 21004

Widely adapted to Caribbean, Middle East, and South America.

PLANTING TIP



Tomato has approximately 350 seeds per gram. If **TRANSPLANTING**, you will need approximately 140 grams of seed per hectare. There should be a space of 20-70 cm between plants, and 30-60 cm between rows.







		MATURITY		SHAPE	EXTERIOR	
VARIETY	CLASS	(Transplant)	WEIGHT	(L:D Ratio)	RIND	FEATURES
EM Scarlet	Crimson Sweet	80 days	9-11 kg	Round-oval 1.2 : 1	Bright green with light green stripes	Good shipper; Fusarium wilt resistant.
Emerald Sweet	Crimson Sweet	88 days	10-12 kg	Oblong 1.6 : 1	Dark with light green stripes	Fusarium wilt, anthracnose resistant.
EM 802	Crimson Sweet	83 days; mid-early	10-13 kg	Short oval 1.3 : 1	Med-green with light green stripes	Early, high yield, attractive; Fusarium wilt resistant.
EMCS 619	Crimson Sweet	85 days	12-14 kg	Oval 1.4 : 1	Dark with light green stripes	Very large, blocky fruit; Fusarium wilt resistant.
EMCS 9678	Crimson Sweet	85 days	10-12 kg	Long Oval 1.8 : 1	Dark with light green stripes	Very large, solid shipper; Fusarium wilt resistant.
Virtuous (EMTCS 2020)	Crimson Sweet (seedless)	80 days	8-10 kg	Round oval 1.2 : 1	Dark green stripes	Vigorous plant, large fruits; seedless.
EMCS 615	All Sweet	88 days mid-late	12-14 kg	Elongated Blocky 1.8 : 1	Dark with light green stripes	Deep red flesh; fusarium and an- thracnose resistant.
EM 296	All Sweet	88 days mid-late	11-13 kg	Elongated 1.7: 1	Dark with light green stripes	Vigorous plant; Fusarium and anthracnose resistant.
EM 800	All Sweet	85 days	11-13 kg	Long Blocky 2:1	Dark with light green stripes	Fusarium wilt resistant.
Regal Grey	Charleston Grey	88 days	12-13 kg	Elongated 2:1	Light green	Fusarium and Anthracnose resistant.
EMCG 905	Charleston Grey	90 days	12-13 kg	Elongated 2:1	Light green	Fusarium and Anthracnose resistant.
EMGB 900	Greybelle	85 days	10-12 kg	Oval 1.2 : 1	Light green	Fusarium and Anthracnose resistant.



In COOL climates with short growing seasons, start seeds indoors 2 to 3 weeks before your last frost date. Plan to transplant seedlings about 2 weeks after that date.

In **WARMER** climates with long growing seasons, sow seeds directly outdoors 1 to 2 weeks after your last frost date, as long as the soil temperature has warmed to at least 70°F (21°C). Warmer soil helps prevent poor germination.





KEEP SOIL MOIST, but not waterlogged. Water at the vine's base in the morning, and try to avoid wetting the leaves, as well as overhead watering. Reduce watering once fruits are about the size of a tennis ball. Dry weather produces the sweetest fruit.



EM SCARLET

Crimson Sweet type with excellent quality. Slightly oval, medium green color, 9-11 kg in weight.



EMERALD SWEET

Very productive, weights 10-12 kg and is a good shipper. Flesh is bright red and has excellent texture.



EM 802

Vigorous plant, high tolerance to Fusarium. Shape is round to short oval; very good shelf life.



EMCS 619

Top Gun type with darker green rind color in the Crimson Sweet segment. Brix in 12 range.



EMCS 9678

Beautiful Crimson Sweet class, weights up to 12 kg. Excellent shipper.



EMCG 905

Elongated, Charleston Gray class. Resistant to Fusarium and Anthracnose.

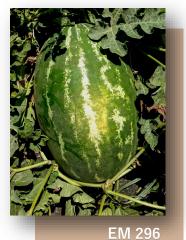








EMCS 615
Large All Sweet class hybrid.
Mid-late variety that can
weight up to 14 kg. Deep red
flesh.



Very large Cal Sweet diploid hybrid. Mid-season variety with good cover and high production.



EM 800
Excellent All Sweet type.
Sugars around 12 brix. Its
thick rind makes it ideal for
long distance transportation.



Extra sweet Charleston Grey type. Weights up to 13 kg and matures approximately 88 days from transplanting.



Seedless, Crimson Sweet class. Plant is vigorous, gives good coverage, and produces large fruits.



Large, round Greybelle class. Strong vines and virus resistance.



SOW seeds 1 inch deep in rows, or in hills spaced 6 feet apart. After 2 weeks, thin to 2 plants per hill.

To reduce insect and disease problems, **AVOID** planting cucumber family crops (melons, squash, pumpkins) in the same spot two years in a row.



NOTES

