

## TERMS USED IN DESCRIPTIONS

Maturity = Days from transplant to first harvest

The days to the first harvest depend on both the soil and air temperatures which are very different from location to location. Our estimates are based on averages suggested by a variety of seed sources.

Early season: Less than 70 days

Midseason: 70-80 days

Late: Over 80 days

DET = Determinate tomato plants

IND = Indeterminate tomato plants

(See *Tomato Information page*)

## HARDENING OFF PLANTS

In the spring, seedlings should be hardened-off at least two weeks before transplanting into the soil. This helps greenhouse grown plants get used to outside conditions and prevents damage from sudden changes in light intensity and temperature. Plants not hardened off may suffer and recover but this can delay fruiting and flowering.

Planting time is after the last estimated frost date. In Chambersburg that is May 12. If there is a frost warning after planting, cover the plants with paper or cloth. Do not use plastic as it will freeze where it touches the plant.

Place seedlings and small plants in a sheltered area and expose them to outdoor conditions for several hours on mild days. At night, place plants on a sheltered porch or garage area, away from gas and engine exhaust, to protect them from cool nighttime temperatures that can damage them. Gradually, during the next two weeks, move plants into sunlight, increasing the time each day. Do not put tender seedlings outdoors on windy days or when temperatures are below 45°F. Reduce the frequency of watering to prevent lush, weak growth, but do not allow plants to wilt.

## LIFE CYCLE

A = Annual: grows during only one season; must be planted each year

Bi = Biennial: requires two growing seasons to complete its life cycle; flowers 2nd year

P = Perennial: grows & produces flowers & seeds every year

TP= Tender perennial: requires shelter in winter in our area

## LIGHT REQUIREMENTS

S= Sun: 6 hours direct sunlight; 8 hours is better

PS= Part sun (tolerates some shade)

SH= Shade

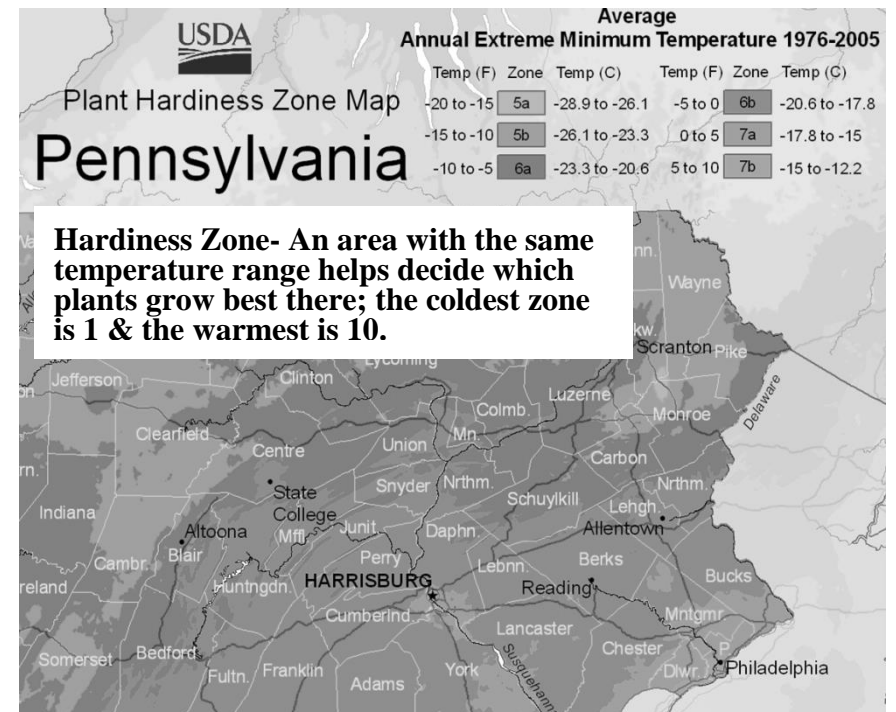
## **GROWING SEASON in Franklin County, PA**

➔ **Franklin County is located in USDA Hardiness ZONE 6B.**

**Average last Spring frost: May 12**

**Average first Fall frost: Oct. 15**

**Average Growing Season > 163 days**



	<b>TOMATOES BY USE</b>	2015			
QUANT	<b>NAME (H=Heirloom)</b>	<b>COLOR</b>	<b>TYPE</b>	<b>Maturity</b>	<b>NOTES</b>
	🔗 See Heirloom Stories Page			Days	
	<b>SALAD</b>				
	Blush (Top favorite)	Blush	IND	69	Early. 2" olive shaped elongated. Sweet tropical taste w/good visual appeal. Can be sprawling.
	Dr. Carolyn	Yellow	IND	79	Midseason. 1" fruit in clusters. Hardy. Heavy yield. Sweet. Can be sprawling.
	Fourth of July	Red	IND	49	Early. 4 oz. fruit. Plentiful, full flavor. Hybrid. Celebrate 4th of July with fresh tomatoes!
	Garden Peach - H 🔗	Yellow	IND	56	Midseason. 2-4 oz. Yellow, fuzzy fruit with pink blush. Mild tasting, abundant supply, good keeper, unique.
	Jazzy	Red	IND	32	Extremely early. 3/4 oz. cherry. Great for salads. Hybrid.
	Pink Bumble Bee	Pink	IND	70	Midseason. 1-1/2" cherry. Dark pink striped with yellow. Sweet flavor. Crack resistant, tolerates heat.
	Smarty	Red	IND	60	Early. 1 oz. Full flavored, excellent texture. Little cracking, compact plant. Very productive.
	<b>PASTE</b>				
	Amish Paste - H 🔗	Red	IND	85	Late. 8-12 oz. Roma-type. Perfect for paste and canning. Coreless, meaty flesh. Stake.
	Principe Borghese -H 🔗	Red	DET	78	Midseason. 1-2 oz. Italian Heirloom. Plum shaped, crack resistant. Great for drying, sauce, salads. Top favorite.
	San Marzano- H 🔗	Red	IND	85	Late. 3" elongated fruit. Heirloom, strong, sweet, less acidic taste. Thick flesh, few seeds. Long season.
	Speckled Roman	Red	IND	85	Late. 6-8 oz. fruit. Red skin, gold streaks, meaty flesh, little juice, excellent flavor.
	<b>SLICER</b>				
	Arkansas Traveler - H 🔗	Pink	IND	85	Late. 6 oz. medium sized, creamy mild flavor. Crack resistant. Tolerates heat.
	Beef Master	Red	IND	80	Midseason. 1- 1/2 lbs. Giant mouth-watering tomato with intense flavor. Heavy, needs support. Stake.
	Better Boy	Red	IND	72	Midseason. 10-16 oz. Heavy producer. Hybrid. Resistant to disease. Stake.
	Brandywines-H 🔗	Pink	IND	90	Late. 1 lb. Large oblate, meaty, with superb flavor. Potato leaf, high yield. Some cracking.
	Chef's Choice	Orange	IND	75	Midseason. 8-11 oz. fruit, low in acid .Good flavor and texture, high yielding.
	Cherokee Purple- H 🔗	Pink	IND	85	Late. 10-12 oz., dusky pink, rich red interior. Sweet, rich taste. Good producer.
	Green Zebra	Green	IND	78	Midseason. 3-4 oz. fruit, tangy salad tomato. Green fruit with darker green stripes. Long season.
	Mortgage Lifter - H 🔗	Pink	IND	85	Late. 1-2 lbs. Long season. Mild flavor. Stake.
	Old Brooks (Top favorite)	Red	IND	78	Midseason. 6-8 oz. fruit. Bright red round fruit, high acid, full tangy flavor. Great for canning.
	Orange Russian	Gold	IND	85	Late. 8 oz., heart shaped. Smooth golden flesh w/streaks of red. Sweet, delicious fruity flavor, meaty & few seeds.
	Pineapple	Yellow	IND	90	Late. 5" and larger. Yellow-red striped fruit. Meaty flesh, mild flavor, high yield.
	Rose	Rose	IND	80	Midseason. 10 oz. meaty, crack resistant fruit. Excellent flavor, vigorous, strong plant.
	Scarlet Red	Red	DET	73	Midseason. 1-1/4 lbs. Scarlet red interior, Excellent firmness and shelf life. Disease resistant.
	Striped German	Yellow	IND	78	Midseason. 1-2 lb. fruit, red-yellow stripes, dense juicy flesh. Excellent flavor.
	Stupice - H 🔗	Red	IND	52	Extremely early. 2-3" fruit. Great flavor. Heavy yield. Long season. Cold tolerant. Potato leaf.

**Maturity days estimated    Days from transplant to first fruit harvest**  
 Early season: Less than 70 days    Midseason: 70-80 days    Late: Over 80 days

## **HEIRLOOM STORIES: TOMATOES**

**Amish Paste:** This plum variety may have originated in the 1870's with the Amish in Medford, Wisconsin. Later, Amish Paste was "discovered" in the heart of Lancaster County, PA, when seeds were acquired by Heirloom Seeds from Lancaster Amish farms.

**Arkansas Traveler:** This 100-year-old heirloom tomato was grown throughout the South. It has great taste, well-balanced sweet/tart flavors and does well in high heat, humidity or drought plus is resistant to cracking and disease.

**Brandywine:** The first heirloom to achieve "cult status," it's a pink, Amish variety from the 1880's. Burpee® listed a Brandywine in their 1886 catalog and Johnson and Stokes listed a variety called Brandywine in 1889. The seed was sent to Seed Savers Exchange collection from Ohio in 1982 with information that the Sudduth-Hill family had been seed saving for over 80 years.

**Cherokee Purple:** This heirloom from Tennessee was cultivated by the Native American Cherokee tribe. It is considered one of the best tasting heirloom tomatoes because of its rich, complex and sweet flavor.

**Garden Peach:** These are native to South America, mainly from Peru, where they are known as *coconas* and they grow naturally in Columbia, Ecuador and Peru. It's a small, bright yellow round fruit with a fuzzy skin, resembling a peach. It is very prolific with a mild, fruity-sweet taste and is often used as a salad tomato. These are recommended for container growing.

**Mortgage Lifter:** In the 1930s, M.C. "Radiator Charlie" Byles was a radiator repairman in Logan, West Virginia and amateur tomato breeder. He wanted to breed a tomato, large and meaty, that could feed families. He crossed four of the biggest tomato varieties he could find, then selected and cross-pollinated his strongest plants for six years to reach his dream tomato which often weighed four pounds. People drove hundreds of miles for his tomatoes. By selling his seedlings for \$1 (a rather hefty sum back then), he was able to pay off his \$6,000 mortgage in six years.

**San Marzano:** The first seeds of the San Marzano tomato came to Campania in 1770, as a gift from the Kingdom of Peru to the Kingdom of Naples. It was planted near the community of San Marzano. It is the most important industrial tomato of the 20th century providing commercial canneries with a sturdy and tasty fruit. It is the preferred variety of local restaurants and excellent for canning.

**Stupice (Stu- PEECH-ay):** This is one of four varieties from the former Czechoslovakia brought to the U.S. by Milan Sodomka. These potato leaf plants are found in northern climates and produce early, great flavor fruits with heavy yields all season. These are the earliest of the tomatoes grown in the Franklin County, PA, Master Gardener plots.

## TIPS FOR GROWING TOMATOES

Good garden practices apply here:

- Get a soil test (available at the County Extension Office) and amend the soil as needed.
- Use mulch to block weeds and conserve water. Our Master Gardeners lay soaker hoses, if needed, cover with 2-3 layers of newspaper and top with straw.
- Warm season crops need full sun, 8-10 hours is best.

Put stakes in first, before the plants, to keep from disturbing the roots. Many tomatoes, especially ones with large fruit, may need both stakes and tomato cages. You may need to support the stems and fruit if the tomatoes are large by using nylon slings or webbing. Don't use inflexible wire to tie plants to the stake. This can cut into the stem while growing and kill the plant.

Plant tomato transplants by stripping off the bottom leaves and laying the stem horizontally in a wide hole or trench. Tomatoes will grow additional roots along the buried stem giving the plant better stability and access to soil nutrients. *See diagram.*

Don't put fertilizer directly in the hole when planting as it will burn delicate root hairs.

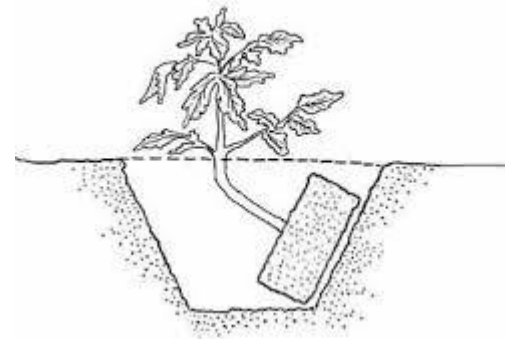
Strip blossoms from plant before planting to promote vigorous and healthy growth.

Extend the harvest on indeterminate plants in the fall. It takes about 6 weeks for a tomato to go from flower blossom to ripe fruit. Pinch back all the blossoms and prune off the growing tip the first week in September, about six weeks before October 15, the first average frost in Franklin County. This will direct the plant's energy into ripening the remaining tomatoes; otherwise, there are always fried green tomatoes.

## Types of Tomatoes: Determinate and Indeterminate

**Determinate** tomatoes are varieties that stop growing when fruit sets on the top bud. All the tomatoes from the plant ripen at approximately the same time (usually over a period of 1- 2 weeks) making them a good choice for canning. These plants are usually around 4 feet in height and work well in containers. To get the most fruit possible from the plant, never prune a determinant tomato.

**Indeterminate** tomatoes will grow and produce fruit until killed by frost. They reach heights of 6-12 feet and require heavy staking, and maybe cages, for support. Indeterminates will bloom, set new fruit and ripen fruit simultaneously throughout the season. They require substantial staking for support. Pruning or pinching side shoots will keep the size in check. Pinching off those on the bottom 10-12" helps keep fruit from touching the ground and keeps a cleaner area.



Plant tomato transplants horizontally to encourage root growth.

## HOW HOT IS IT?

Your taste buds are craving salsa, and it's time to check the peppers growing in the back garden. There are several varieties of "hot" peppers, some turning red, but just how hot are they? We turn to the Scoville Scale for the answer.

Developed by chemist Wilbur Scoville, the scale measures hotness of peppers by measuring the capsaicin (cap-say-ah-sin) content. It's good for comparisons between types of peppers, but remember that plants grown in different conditions may be hotter or sweeter than rated. The ratings are listed for our hot peppers on the information sheet.

**Fighting the Burn:** Capsaicin is alkaline oil. Water and alcohol don't help because they won't dissolve the oil and only spread it around. Acidic food or drink helps neutralize the oil. Try lemon, lime or orange juice, cold lemonade, or tomato drinks.

Dairy foods such as milk, yogurt, sour cream and ice cream are acidic and may help. Eating carbohydrate foods such as bread or tortillas may help by absorbing some of the oil. Chew these but don't swallow. Did you know that most hot-chili eating contests provide bowls of powdered milk and water to participants?

For skin irritations, wash off the oil with soap and warm water. Dry and repeat if needed. Remember, capsaicin is oil and can be spread to other parts of the body by touching. Also, wash all utensils and cutting surfaces with soap and water after use to avoid spreading the oil.

For an upset stomach, drink milk, the more fat content the better, or eat carbohydrate foods like bread and crackers. Mayo Clinic suggests sleep or rest in an upright or slightly inclined position to prevent heartburn and acid reflux.

**Benefits of Capsaicin:** Paradoxically, capsaicin's knack to cause pain makes it helpful in alleviating pain. National Institute of Health research supports the topical use of capsaicin for osteoarthritis and rheumatoid arthritis by lowering sensitivity to pain. Capsaicin can be found in over-the-counter creams and plasters.

Research continues on many other possible benefits in cancer treatments, anti-inflammatory use, weight loss and lowering cholesterol.

Scoville Heat Units	
Chile Pepper	Heat Range
Sweet Bell/Sweet Banana	0
Paprika-Super Red	50 ~ 200
Hot Cherry	50 ~ 500
Pepperoncini	100 ~ 500
Poblano	500 ~ 2,000
Ancho	1,000 ~ 2,000
Anaheim	500 ~ 2,500
Chipotle	5,000 ~ 8,000
Long Thick Cayenne	6,000 ~ 8,500
Jalapeno	2,500 ~ 9,000
Hot Wax	5,000 ~ 9,000
Serrano	8,000 ~ 22,000
Tabasco	30,000 ~ 50,000
Cayenne	30,000 ~ 50,000
Super Chile	40,000 ~ 50,000
Thai	50,000 ~ 100,000
Orange Habanero	150,000 ~ 325,000
TigrePaw-NR	265,000 ~ 348,000
Chocolate Habanero	325,000 ~ 425,000
Naga Viper	800,000 ~ 1,382,118
Naga Jolokia "Ghost Pepper"	1,020,000 ~ 1,578,000
Moruga Scorpion	1,200,000 ~ 2,009,231
Common Pepper Spray	2-3,000,000
Police Grade Spray	5,300,000
Pure Capsaicin	15-16,000,000

2015	PEPPERS				
QUANT	NAME (H=Heirloom)	COLOR	Maturity	HEAT	NOTES
	* See our story page		Days		
	<b>PEPPERS</b>				
	California Wonder H*	Gr/Red	75	0	3.5 x 4" Standard bell pepper. Exc. for stuffing.
	Goddess	Yel/Red	83	0	8-9" long. Sweet banana. Good fresh or pickled.
	Gourmet	Gr/Or	85	0	3x5" Medium/large. Blocky fruit, thick walls, sweet flavor. High yielding.
	Lunch Box Orange	Gr/Or	75	0	2-3" Mini size. Sweet. Exc. fresh snack, in salads or sauteed.
	Lunch Box Red	Gr/Red	75	0	2-3" Mini size. Sweet. Exc. fresh snack, in salads or sauteed.
	Paprika- Bill Dorman	Gr/Red		50-200	3-4" .Mild.
	Red Knight	Gr/Red	77	0	4.5 x 4.5" Big block, thick-walled. Goes red early. Fruity & sweet. Good fresh.
	Sweet Chocolate	Gr/DkRed	75	0	4 x 4" medium-sized, semi-bell ripens very early, good in north areas. Sweet. Cola-red color. Great in salads.
	Vanguard	Gr/Red	72	0	4.5 x 4.25" Extra large/jumbo size. High yield. Extended harvest. May need staked.
<b>TIP:</b>	<i>Try Vanguard. Special breeding gives it disease resistance, high yields of large to jumbo peppers-blocky, firm, thick-walled.</i>				
	<b>HOT</b>				<b>Use caution when working with hot peppers.</b>
	Ancho	Gr/Red	88	1,000-1,500	Mild heat. 4.5 x 2.5" Sweet, hot flavor. Fresh=poblanos/Dried=anchos. Authentic Mexican cooking.
	Black Pearl	Red/Blk	80	30,000-50,000	Medium heat. 1" pearls. Beautiful <b>ornamental</b> with hot fruit.
	Chiltepin - H*	Gr/Red	100	50,000-100,000	HOT. 1.5" Small, pea-like fruits on 12-24" bushes. Dry for spices. Use in salsas & sauces. Mix w/spices & pickle.
	Fajita - H	Gr/Red	75	100-1,000	Mild heat. 2-3" Round bell. Good fresh. Salsa. Grilling, roasting, pickling.
	Fish - H*	Yel/Red	80	5,000-30,000	Mild-Medium heat. 1.5-2" Fish/shellfish recipes. White pods sub for red flakes. Beautiful foliage.
	Ghost (Bhut Jolokia)	Red	110	850,000-2,100,000	HOT! 2-3" Up to 4' plants. Slow to mature. Very prolific. Drying & sauces. <b>USE CAUTION,</b>
	Habanero	Gr/Or	100	100,000-350,000	Super HOT. 2 x 1.25" Fresh & dried. For "Jerk" sauces. Ripens from green to orange
	Highlander	Gr/Red	85	500-2,500	Mild heat. 7x2" Early. Good productivity. Tall plants. Tolerates cold. Grill, roast, stuff. An Anaheim pepper.
	Hinkle Hatz H*	Red/Yel	105	5,000 to 30,000	Mild-heat. 1 x .75" Prolific. Tolerates cold. Long season. Pickled & sauces.
	Hungarian Hot Wax	Yel/Red	83	5,000-10,000	Medium. 5.5 x 1.5" Easy to stuff, fry & roast. Pretty pickled peppers. Tolerates cold.
	Jalapego	Gr/Red	93	2,500-10,000	Medium-heat. 3.5-4" High yield jalapeno. Salsa & pickling.
	Joe's Long Cayenne -H*	Gr/Red	85	30,000-50,000	Medium heat. 8-10" Dries well. Hot sauce, pepper flakes, ristras.

## **HEIRLOOM STORIES: PEPPERS & EGGPLANTS**

**Joe's Long Cayenne Pepper:** Originally from Calabria, Italy, it circulated through the Italian-Canadian seed saving community in Toronto before being sent to the Seed Savers Exchange in 1996.

**Hinkel Hatz Pepper:** This hot pepper is named for the fruits the size and shape of chicken hearts - which is the translation of hinkel hatz. It is a rare Pennsylvania Dutch heirloom dating to before 1880. The peppers are usually red or yellow, though an even more rare orange variant exists preserved among a small group of Mennonite farmers in Maxatawy, Pennsylvania. This has been cultivated for over 150 years. The peppers were traditionally used in pickled form as well as cooked and pureed into a "pepper vinegar" similar to Tabasco sauce.

**Chiltepin Pepper:** You may be surprised to learn that the chiltepin is actually a pepper native to North America. In fact, it's the only one, making it known to many above the border as "the mother of all peppers." The chiltepin pepper has a rich history in Native American culture, and its tiny size along with its intense (but short-lived) heat has made it a unique favorite among today's hot pepper lovers.

**Fish Pepper:** These peppers are dated to the early 1800's when they were grown by African Americans in Philadelphia and Baltimore. They were said to be used by black chefs to make white paprika for fish and shellfish cream sauces, a secret ingredient passed down through oral history. The white pods were used where red peppers would detract from the dish's appearance. The story of these peppers' mid-1900's rediscovery may be due to a barter made by men trading bees for seeds. In the 1940's, Horace Pippin of West Chester, Pennsylvania, sought a unique remedy for his war wounds. Learning that bee stings may relieve the pain of his wounds, Pippin bought bees from H. Ralph Weaver. In exchange, Pippin offered what he had -- tons of interesting vegetable seeds, including the rare fish pepper. It was made available to the public in the 1995 Seed Savers Exchange Yearbook.

**California Wonder Pepper:** Hands down, California Wonder is the classic sweet bell pepper. Familiar to all vegetable gardeners for ages, this classic heirloom pepper has set the standard since the late 1920's. After nearly a century, "California Wonder" is still the largest heirloom bell pepper plant available for home gardens. These open-pollinated bell peppers produce upright plants that are 18 to 24 inches tall with sweet-flavored, thick-fleshed fruits that begin as glossy green, three- to four-lobed globes and then mature to a bright red. First introduced in 1928, the fruits are culinary staples, whether stuffed, chopped into salads or grilled beside fajitas.

**Black Beauty Eggplant:** Over 100 years old, this 1902 Burpee® introduction was an immediate hit because the plants ripened perfect fruits dramatically earlier than other varieties. It became the common market eggplant of today. Burpee® notes that the best taste is when used fresh from the harvest.

2015	<b>VEGETABLES</b>				
<b>QUANT</b>	<b>NAME (H=Heirloom)</b>	<b>COLOR</b>	<b>Maturity</b>	<b>NOTES</b>	
	* See our story page		Days		
	<b>EGGPLANTS</b>				
	Black Beauty H*	Black	74	4-6" heavy fruits with thin skin & soft seeds. Early harvest. Harvest often for best yield. Wide spread needs staked & branch support. Great for frying & parmesan dishes.	
	Cookstown Orange	Red/orange	69	Ornamental. Medium tomato size & shape. Red orange with two tone green striping. Yellow flesh, non-bitter when harvested	
	Early Black	Deep purple	65	5" egg shaped fruits. Early Japanese variety. Perfect size for slicing & making eggplant tempura. Vigorous plants, sets well in Mid-Atlantic & tolerant of flea beetles.	
	Kermit	Green	60	2" small ball shaped fruit. Vigorous plant, generous harvest. Excellent in Asian and curry dishes. Great for shish kebabs.	
	Nadia (F-1)	Deep purple	67	7-8" long. Uniform, glossy Italian type. Excellent shelf life. High yield. Tolerates cool conditions.	
	Orient Express (F1)	Deep purple	58	8-10" long. Extra early, tolerates cool conditions & heat stress. Tender, delicately flavored & quick cooking. Asian type. Great grilled, roasted or in stir-fried.	
	Rosa Bianca H	Lavender/white	73	5-7" diameter, 4-6" long. Italian round heirloom w/ mild creamy taste & few seeds. Great stuffed, sliced or filled & rolled.	
	Snowy	White	60	6" long oval. Firm, meaty fruit w/delicate sweet flavor. Vigorous, upright plants adapted to cool & hot weather.	
	<b>TOMATILLO</b>				
	Toma Verde	Green	60	2-4 oz. fruit. Tomatillo makes milder but zesty flavored salsa verde. Harvest when paper shell turns brown & splits. Hardy, heat & drought tolerant.	
	<b>OTHER</b>				
	Shallots				
	Leeks, King Richard				
<b>Other vegetable transplants may be available depending on germination and availability.</b>					
<b>If available, these will be in limited supply. If you are interested, look for these plants first.</b>					



## HEIRLOOM STORIES: FLOWERS & VINES

**Poppies:** In gardens of Elizabethan times, poppies were found in many different colors and forms, many of great beauty with fringed edges and vibrant colors with contrasting centers. The overlong name given at that time, "*John Silver-pin, fair without and foul within,*" refers to its unpleasant aroma when smelled up close. Today these beautiful plants come in hundreds of varieties, some rare, and are typically difficult to grow from seed. The seed pods of many varieties are often prized by florists for arrangements. Check out the photo array of what we are seeding in the greenhouse. Availability is dependent on germination rate.

**Bells of Ireland:** Bells-of-Ireland are also known as Shellflowers. Its scientific name is taken from the Molucca Islands, west of New Guinea, supposedly the original home of this annual plant. The enlarged, intensely green calyxes lead to the designation of Bells of Ireland. A native to Turkey, Syria and the Caucasus, it has been cultivated since 1570. The species name *laevis* means smooth, free from hairs or roughness. Excellent as long-lasting cut-flowers, they are prized for their dried flowers that fade to a tea-rinsed linen hue.

**Cup and Saucer Vine:** The Cup and Saucer Vine is also known as Mexican ivy or monastery bells. Its scientific name, *Cobaea scandens*, honors the Jesuit naturalist Bernabé Cobo (1582-1657), a missionary who lived in Mexico and South America. It was known as Mexican Climbing Cobaea when introduced in 1792. This plant is pollinated by bats and at dusk, at about the time that bats would emerge, the flowers emit a scent that attracts them. The bats visit for nectar but their furry chests transport pollen from plant to plant. Charles Darwin was so impressed he studied *Cobaea* for his book [The Movements and Habits of Climbing Plants](#) (1875).

**Scabiosa (S. atropurpurea):** *Scabiosa*, commonly known as Pincushion Flower, is also called Sweet Scabious from its sweet honey fragrance. The genus name *Scabiosa* derives from the Latin *scabere* meaning "to scratch". In medieval times these plants were believed to relieve the itch of scabies and other skin afflictions caused by the Bubonic Plague. In the 17th century, Nicholas Culpepper prescribed it to cure wounds, swollen throats, snake-bite and the plague. Long-flowering from early summer to late autumn, it's a favorite of bees and butterflies.

**Scarlet Runner Bean:** This beautiful vine, introduced before 1750, originated in Mexico and Central America and was popularized by the great 18th-century English garden writer, Philip Miller. Jefferson planted this lovely vine with its showy scarlet flowers in 1812, noting: "Arbor beans white, crimson, scarlet, purple...on long walk of garden." In 1806 the Philadelphia nurseryman Bernard McMahon wrote that it was grown in America exclusively as an ornamental. It has edible beans, but hummingbirds can't get enough of the stunning flowers.

QUANT	NAME	VARIETY	COLOR	Cycle	SIZE	USES/NOTES
	<b>FLOWERS * See our story page</b>					
	Bells of Ireland ( <i>Molucella laevis</i> ) *		Green	A/S	2'	Many small green "bells" grow in whorls around the minty-scented hollow stems; Cut flower, dried. Summer bloom.
	Cardoon ( <i>Cynara cardunculus</i> )		Purple	B/S	3-5'	Thistle family; specimen ornamental dies back yr 1 & flowers yr 2; bees love it
	Celosia	Red Flame	Red	A/S	2-2.5'	Cockscomb-type; 2-4" flowers on burgundy stems; Cut-flower, dried. Summer bloom.
	Celosia	Ruby Parfait	Dark Rose	A/S	2-2.5'	Wheat-type; arrow-shaped velvety plumes 2-3"; Cut-flower, container filler, dried. Summer-fall bloom.
	Eye Ball Plant ( <i>Spilanthes oleracea</i> )	Rare	Gold/Red	TP/PS	1-1.5'	Olive-shaped 1" blooms w/red eye; cold sensitive; pinch to branch; Novelty plant, cut flower, containers. Summer bloom.
	Eye Ball Plant ( <i>Spilanthes oleracea</i> )	Lemon Drop/rare	Bright Yel	TP/PS	1-1.5'	Gumdrop-shaped 1" blooms bright lemon yellow; cold sensitive; pinch to branch; Novelty plant, cut flower, containers. Summer bloom.
	Godetia ( <i>Godetia rubicunda</i> )	Satin Flower/rare	Variety	A/S&PS	3'	Frippy flowers or upright spikes; tolerates drought; good cut flowers
	Lisianthus ( <i>Eustoma grandiflorum</i> )	Various	Various	A/S	2-3'	Elegant 3" rose-like beauties, premium cut flower used by florists; bees & butterflies love it; best in pots for easier care. Midsummer-early fall.
	Mignonette ( <i>Reseda Odorata Machet</i> )		White	A/s-PS	1'	Small, fringed flwrs very fragrant spicy perfume. Mid-summer-frost. Cut flowers hold fragrance; Container & as dried flwrs.
	Poppy* ( <i>Papaver somniferum</i> )	Cherry Glow	Ruby red	A/S	2-3'	4-5" tulip-shaped blooms; Cut flower, dried pods. Summer bloom
	Poppy ( <i>Papaver somniferum</i> )	Danish Flag	Scarlet	A/S	2-3'	4-5" scarlet with white blotch blooms; Cut flower, dried pods. Summer bloom.
	Poppy ( <i>Papaver somniferum</i> )	Heirloom	Mix	A/S	2-3'	4-5" mix of hues (lavender, blk. raspberry, cherry, deep claret); some fringed/tulip. Summer bloom.
	Poppy ( <i>Papaver somniferum</i> )	Imperial Pink/rare	Pink	A/S	2-3'	4-5" blooms, fringed or tulip shape w/pale lavender marks; Cut-flower, dried pods. Summer bloom.
	Poppy ( <i>Papaver somniferum</i> )	Lauren's Grape/rare	Pur/Violet	A/S	2-3'	4-5" intense purple/violet color; tulip shape; Cut flower, dried pods. Summer bloom.
	Poppy ( <i>Papaver paeoniflorum</i> )	Peony Black	Purple	A/S	2-3'	Peony type; 5" dark purple feathery blooms; Cut-flower, dried pods. Summer bloom.
	Poppy ( <i>Papaver laciniatum</i> )	Swansdown	White	A/S	2-3'	Peony type; 5" feathery double blooms deeply fringed; Cut-flower, dried pods. Summer bloom.
	Salvia	Clary Sage		Bi/S		Sturdy plant blooms second year w/
	Scabiosa atropurpurea *	Black Knight	Near Black	A/S	2-3'	Many 2" blooms atop ferny foliage; Cut flower, fragrant. Summer to autumn bloom.
	Tithonia	Mexican Torch	Orange	A/S	4-6'	4-6" bright orange blooms on tall stems, may need staking; Cut flower, magnet for hummingbirds, bees and butterflies. Summer-frost bloom.
	Zinnia	Profusion Mix	Variety	A/S	12"	Many 1" blooms; heat/disease/drought tolerant; Edging, bedding, containers. Summer-frost bloom.
	<b>VINES</b>					
	Black-Eyed Susan ( <i>Thunbergia alata</i> )		Orange	A/S	5-6'	Vine w/2-3" blooms; exc as the "spiller" in containers; dramatic on trellis or fence
	Cup and Saucer ( <i>Cobaea scandens</i> ) * Rare		Purple	A/S	6-8+'	Vine w/cup-shaped flowers sitting on green sepal "saucers;" vines early & blooms late summer; great on trellis or arbor; can take over containers
	Everlasting Pea ( <i>Lathyrus latifolius</i> )	Pink Pearl (rare)	Pink	P/S	3-6'	Vine w/ 1" pea-like flowers; will sprawl w/o support; bees & butterflies like them; excellent cut flower; seeds are poisonous & may self-seed to be invasive
	Hyacinth Bean ( <i>Dolichos Lablab</i> )		Purple	A/S	10-15'	Fast growing vine with purple flowers & beautiful dark purple bean pods; butterflies; bloom summer-fall; can be invasive; beans are poisonous; needs sturdy support
	Red Cardinal Climber ( <i>Ipomoea sloteri</i> )	Rare	Red	A/S	6-12'	Vine w/ red flowers w/white throat; mid-summer to fall bloom
	Scarlet Runner Bean *		Red	A/S	6-8'	Vine; scarlet flwrs in clusters; ornamental or veg. Eat young pods whole or the beans fresh or dried.
	Spanish Flag ( <i>Ipomoea lobata</i> )	Rare	Red/Yellow	A/S	8-10'	Vine w/alternating red&yellow flwrs; perfect for arbors & trellis; late sum-fall bloom; attracts bees & butterflies

2015	HERBS				Other herbs divided from MG demonstration gardens or yards may be available at the sale.
			Life		
QUANT	NAME	VARIETY	Cycle	SIZE	NOTES/USES
	Basil	Genovese basil	A/S	2-3'	Authentic Italian flavor/aroma; pesto favorite; slow to bolt; pinch & harvest often
	Basil	Sweet Thai	A/S	2'	Light anise flavor/aroma; thinner leaves w/ beautiful purple flwr; favorite in Thai/Vietnamese foods esp. pho (soup)
	Basil	Opal	A/S	18"	Dk purple leaves; musky flavor; exc for seasoning&makes vinegar a beautiful red; AAS winner stuns in the garden
	Basil	Cinnamon	A/S	2'	Hardy plant w/rose flwrs; strong cinnamon scent w/ light flavor; Asian dishes, sorbet, chutney; frost tolerant
	Chives	Garlic	P	2'	Use blades for mild onion flavor in dishes w/o strong tastes; dry or freeze to preserve; flowers edible or use in stir fry
	Cilantro (Coriandrum sativum)		A/S	3'	Leaves=cilantro,seeds=coriander;zesty herb w/flavor all its own;Mex&Asian dishes
	Dill	Mammoth	A/S	3'	Huge plants need staked; prolific, heat tolerant;Finely cut foliage. Seed for dill pickles. Caterpillars will feed on it.
	Lemon grass		TP/S	3-4'	Lemon scented/flavored; Leaves: fish, soups,curries sauces,exc. tea; Leaf bases in Thai/Vietnamese dishes; stir fry
	Parsley	Italian Flatleaf	B/S	1'	Pref by chefs;extra rich flavor;adds European character to soups&stews;cut at stem bottom
	Rosemary	ARP (Winter hardy)	TP/S	2-4'	Exc flavor for poultry, meats, potatoes; good in potpourri; best planted in containers for indoor overwintering
	Salad Burnet		A/S	1'	Nut-cucumber flavor;salads,dressings, soups, casseroles, herb vinegars&cream cheeses
	Savory (Satureja hortensis)	Summer	A	1'	Mild thyme-like taste;gd salt substitute;soups,stuffings desserts & breading for meats/fish; compliments bean dishes;French Herbes de Provence seasoning.
	Savory (Satureja montana)	Winter	P	1-2'	Spicy taste compliments fish,beans&poultry w/intense flavor; flavor liquors,garnish salad
	Woad (Isatis tinctoria)		P/SP	3-4'	Cultivated for blue dye properties for textiles, ink & paints; yellow flwrs June-August
	<b>Other dye plants may be available:</b>				Dyer's chamomile, tansy, yarrow, goldenrod
	Also available:				
	Mints	Various	P/S	2-4'	Exc in drinks&teas; good in confections; always put mints in pots-can be invasive
	Spearmint				Cool mint taste; teas & Greek dishes; always put mints in pots-can be invasive
	<b>Other mints may be available:</b>				Expect available: apple, Mojito, peppermint (spicy mint taste)
	Salvia	Garden Sage	P	1-2'	Robust flavor esp w/ eggs, poultry, fish beans & bread; dry rubs;desserts w/apples; sage&honey tea for sore throat;grey-green pebbled leaves are gd ornamental in garden
	Stevia		A/S	2-3'	Sweeter than sugar w/no calories; teas, drinks, desserts; not rec. for baking; fresh leaves have maple or licorice taste-try dried, crushed as garnish; put in pot to overwinter indoors
	Tarragon	French	P	2' +	Classic French herb w/spicy anise(licorice) taste; w/chicken,sauces,soups&meat dishes; good in tea mixes; easily dries to preserve
	Thyme	English	P	1'	Gd w/lamb,beef,eggs,teas&infused in honey; keep pruned; dries easily for preserving
	<b>Othe thymes may be available:</b>				Lemon, Spicy Orange, Elfin, Wooly

## Notices

Plant availability and supply is dependent on seed germination in our Greenhouse. The material in this catalog is for information only. Where trade names appear, no discrimination is intended, and no endorsement by Penn State Cooperative Extension is implied.

Our thanks to these businesses and people that were sources for seeds, descriptions and/or photographs:

Baker Creek Heirloom Seeds (<http://www.rareseeds.com>)

Ball Seed (<http://www.ballseed.com>)

Burpee Seed and Plants (<http://www.burpee.com>)

Harris Seed Company (<http://www.harriseseeds.com>)

Carole Anderson's Website ([iplanthappiness.com](http://iplanthappiness.com))

Johnny's Select Seeds (<http://www.johnnyseeds.com>)

Local Harvest (<http://localharvest.org>)

Sand Hill (<http://www.sandhillpreservation.com>)

Seattle Seed Co. (<http://www.seattleseed.com>)

Park Seed Co. (<http://parkseed.com/>)

Seed Savers (<http://www.seedsavers.org>)

Seeds of Change (<http://www.seedsofchange.com/Home.aspx>)

Seedway (<http://www.seedway.com/Pages/home.aspx>)

Select Seed (<http://www.selectseeds.com>)

Territorial Seed Company (<http://www.territorialseed.com>)

Tomato Casual (<http://www.tomatocasual.com>)

Tomatofest (<http://www.tomatofest.com>)

Tomato Growers (<http://www.tomatogrowers.com>)

Totally Tomatoes (<http://www.totallytomato.com>)

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**Penn State College of Agricultural Sciences research and extension programs are funded in part by Pennsylvania counties, the Commonwealth of Pennsylvania, and the U. S. Department of Agriculture.**

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# Save Monarchs Project



## *Save Monarchs, Plant Milkweed*

Monarchs lay their eggs on milkweed...only milkweed. The larvae eat the milkweed to make them undesirable to predators. Without milkweed, we will have no monarch butterflies. Monarchs need the milkweed native to your area. Tropical milkweeds may disturb the migration schedule. Please research the native milkweeds for your area.

Milkweed (*Asclepias* – *as-KLEE-pea-us*) native to South Central Pennsylvania are:

- \**Asclepias syriaca* - common milkweed
- \**Asclepias incarnata* - swamp milkweed
- \**Asclepias tuberosa* - butterfly weed
- Asclepias purpurascens* - purple milkweed
- Asclepias verticilla* - whorled milkweed
- Asclepias exaltata* - poke milkweed

When handling any parts of milkweed plants, remember: **Do not eat and do not get the white sap (latex) on your skin or eyes.**

- Milkweed is easy to grow.
- Plant it in average soil in full sun.
- Milkweed tolerates poor, dry soil and drought.
- Plants will self-seed if the pods are not removed.
- Monarchs prefer colonies rather than single plants. Their babies eat a lot!

Remember, you are growing milkweed for pollinators to eat. So, when you find eggs, larvae/caterpillars, or munched on leaves, celebrate! Do not apply any insecticide. You have helped our endangered pollinators.

If you are planting milkweed, thank you for joining a nationwide movement to save the monarch butterfly.

*\* These will be available at the Greenhouse Sales*

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