# **Garden Planting Guide**

## **Choosing Seed Varieties**

Part of the enjoyment of planning your garden is choosing which seed varieties you want to grow. Choosing varieties that work best for your growing conditions and take advantage of your environment will ultimately decide the outcome of your growing experience. Below are a few tips when selecting your vegetable, herb and flower seeds.

### Vegetables:

Selecting your veggies before you design your garden will help ensure you have the correct amount of room and the best growing conditions. For smaller gardens choose bush varieties that take up less room. For shorter growing seasons try fast maturing varieties that can produce maximum yields for your growing season.



### Herbs:

Choose herbs by size, growing habits, and life expectancy. Many herbs can live as perennials and will increase in size every season thus needing adequate space to grow and receive the proper nutrition.

### Flowers:

Flowers can reward gardens with beauty and high pollination rates. Mixing flowers in with your vegetable garden will increase yield potentials. Also choosing between annuals and perennials can be hard. Annuals can be easily removed and replaced the next season while perennials will come back every season. Plus, many flower seeds are hard to germinate and require an adequate amount of care and time to grow correctly.

## Planning

Planning is the key to success for any garden or landscaping you plan to grow this season. Choosing a plants location, spacing, and feedings is important in the success of your gardening season. Always be on the safe side when you garden so never bite o- more than you can chew! Grow a smaller garden, one that can be taken care of if time is scarce.

Always leave enough space between vegetables, herbs, and flowers in order for them to breathe correctly and receive proper nutrition. Choose varieties that are correct for your growing conditions. Perennials cannot survive in certain locations so know your hardiness zone and choose perennials accordingly.

For vegetables plan your yields according to family size and whether you will need to freeze, can or practice successive gardening in order to have fresh crops every couple weeks.

## Sowing

Most soil mixes consisting of peat, perlite, and vermiculite are excellent seed sowing media for bedding plants. Besides light and moisture, seeds need warmth to germinate well. A soil temperature of 70°F is sufficient for most crops. Please see the planting depth of most seeds for optimal conditions. Some seeds prefer growing just below the soil including most vegetables, herbs and flowers. Although some flower seeds need light to germinate and should be placed on top of soil.

## Transplanting

After the seeds have germinated, let the surface dry out occasionally. Seedlings should never go through the night with wet leaves. Grow them at proper temperatures as given in this guide for fast, yet sturdy plants. When seedlings have developed their first set of true leaves, they are ready to be transplanted to a 4" inch pot for optimal growing conditions.

Many ingredients can be used, to prepare a good growing medium for bedding plants. Most commonly used are 2 parts soil, 1 part peat moss, and 1 part sand with fertilizer added. Mist the young plants frequently during the first week of transplant until they are well established, then water more thoroughly and less often. Keep your seedlings growing fast with the recommended liquid feeding program.

Some vegetables are recommended for direct sowing such as beans, peas, corn, carrots, radish, pumpkins, cucumbers and others. Some varieties do much better by starting inside such as tomatoes, peppers and herbs. These seeds don't require much attention just a regular watering and should be hardened o- before transplanting outside.

## **Vegetable Planting Tips**



#### **Bean Tips**

Should be directly sowed into your garden and shouldn't be grown as transplants. Be sure not to plant bean seeds too early as they may rot due to cold weather and moist soil. If you insist to start early place a black tarp over the soil to warm its temperature. For Bush bean varieties try a continual planting schedule by sowing a seed every couple weeks which should give you a consistent harvest. Plant bush seeds every 12-18" and be sure to water consistently until germination occurs then every few days. For pole varieties they will need some time to grow their vines but will produce continuous harvest for a couple months. Pole beans need some type of support so be sure to have a trellis or fence ready before planting. Plant seeds every 4" and supply moist soil. Add fertilizer half way through their growing season. Suggest Varieties:

Topcrop – A great bean for canning and freezing. Slenderette – One of the best tasting home garden beans available. Contender – Very productive and needs little care.



#### **Cucumber Tips**

Cucumbers require full sun and a large amount of space in order to develop properly. If space is limited there are some varieties available that can grow in small spaces and containers (Spacemaster). Cucumbers should be directly sowed into your garden and should not be transplanted. Be sure to plant after last frost as any freezing temperatures can kill your plants. In general cucumbers can grow in most soils but prefer a pH of around 6.5. Be sure to add a generous amount of organic compost to your soil before planting your cucumber seeds. This will ensure proper nutrition and produce strong vigorous plants with heavy yields. To maximize fruit growth try applying a minimal amount of fertilizer when needed. A good way to reduce weeding and increase soil moisture is to apply some type of mulch to your garden. Try using at least 4 inches of wood chips or mulch.

Suggested Varieties:

Spacemaster – Great for containers or small gardens. Homemade Pickles – A very popular pickling variety in home gardens.



#### **Onion Tips**

Onions can be a tricky vegetable to grow. The most important aspect to remember about onions is there are two di-fferent categories: long-day and short-day onions. Long-day onions will grow best in northern states while short-day varieties do well in southern states. Short-day onions develop bulbs with an average of 12 hours of daylight. Long-day onions develop better with more sun, around 15-16 hours of daylight. To ensure proper maturation be sure to grow the variety of onion that is suited for your location. Onion seeds can be started both indoor and outdoors but for best results seedlings should be started indoors. When ready to transplant, place onions 3 to 4 inches apart, in rows divided by 15" inches. Onions grow best in rich soft soil, but can grow well in most soils especially with fertilizer. Keep the soil moist and allow good drainage. Suggested Varieties:

Sweet White Walla – A mild onion that can be eaten like an apple. White Spanish – A standard large sweet onion. Yellow Spanish – One of the most popular home grown onions.



#### Pea Tips

Peas are a hardy crop that can provide an abundant harvest in a limited amount of space. There are four main varieties of peas that are grown in the home garden. Garden peas (English peas) have hard outer shell and must be removed. Snap peas have low-fiber pods and are snapped and eaten before the seeds mature. Snow or Sugar peas should be eaten whole with both pod and seeds. Lastly, Cowpeas are shelling peas with excellent avor. Pea seeds should be directly sowed into your garden in early spring. When the seeds begin to germinate they will need a trellis or staking to provide the necessary support. In order to extend harvesting and yield try sowing seeds every week. Peas plants should be spaced every 5" inches. Peas are heavy feeders and will do best with occasional fertilizer. Too much fertilizer can increase foliage but decrease pea yield. Lastly, keep the soil moist and harvest mature pods to keep plant productive. Suggested Varieties:

Super Sugar – Original tall snap pea that has been improved. Oregon Giant – Home garden favorite with excellent yield potential. Little Marvel – Excellent sweet flavor with high yields.



#### **Pepper Tips**

Peppers come in a variety of shapes and sizes as well as a varying degree of sweet to very hot peppers. Today's gardeners enjoy a large selection of home garden peppers; green bell peppers by far being the most popular choice. Peppers can be sowed both indoor and outdoor but for best results we recommend starting pepper seeds indoors, eight to ten weeks or more before the last frost date for your location. Pepper seeds are difficult seed to germinate and seedlings tend to grow slow as well. One way to increase seed germination is to provide a bottom heat to your soil raising it to 80 degrees. This will increase higher and quicker seed germination. When transplanting your pepper plants space 18-24" apart and 24" between rows. Select a location that receives full sun an add plenty of fertilizer to the garden soil. Keep soil moist but not wet.

Suggested Varieties:

California Wonder – A garden staple; easy to grow with great flavor. Early Jalapeno – Early maturing, low-range hot pepper. Cayenne Long Red – Medium-hot pepper with excellent flavor.



#### **Tomato Tips**

Gardens are by far the most popular vegetable in home gardens being grown in over 85% of them. There are many di-fferent types including beefsteak, heirlooms, organic, cherry, paste, mid-size, early ripening and the list goes on. Tomato seeds should be started indoors for best germination results. Start the seeds indoors 6 to 8 weeks before the last frost date for your location. Plant 1/4" deep using sterile soil. This helps prevent disease and other problems. The tomato seeds will germinate best if the soil is kept between 80 to 90 degrees. Water lightly and keep the soil consistently moist until germination occurs. When ready to transplant be sure to harden the young plants o- by placing increasing time outside for a 1 week period. Transplant tomato plants 32" apart and 32" between rows. The more space the better. Plant in a location with full sun and provide fertilizer when needed. Suggested Varieties:

Brandywine – Popular home garden tomato with great flavor. Sweetie – A prolific produce of cherry sized tomatoes. Cherokee Purple – Favorite for taste, unique color, and high yields.

Variety	Planting Depth	Sowing Date	Days to Germination	Soil Temp F°	Plants "	Rows"	Days to Maturity	Family of 4 (typical growing season)	Seeds per Oz.	Seeds per 100' row
Asparagus	4"	Jan-	10	75	14	28	720+	40	750	1 oz .5 lb
Bean Bush	1.5"	Feb	7	80	18	18	50+	plants	100	
Bean Vine	1.5" .5"	May-	7	80 85	4	30	30+ 70+	25'	100	.5 lb
Beets	.5 1"	June	4	85	4 24	18 30	70+ 40+	row 25'	1500 9000	1 oz
Broccoli	1 .5"	May-	4	80 85	24 24	30 30	40+ 70+		9000 8500	.25
Cabbage	.5 .5"	Jun			24 3		100+	row		OZ
Carrots	.5 .5"	March-	6	80		18	100+ 65+	15'	25000	.25
Cauliower	.5 1"	July	5	80 05	15	28	60+ 60+	row	10000	OZ E
Corn	1"	Apr-	5	95	3	24	60+ 60+	15'	75	.5 oz
Cucumber	1	June	3	95	36	40	60+ 50+	row	1000	.25
Eggplant	.5"	Apr-	6	85	24	36	50+ 80+	15	6000	OZ
Gourds	.5"	May	10	80	48	60		plants	1000	.4 lb
Kale	.25"	Jan-	4	80	18	24	100+	30'	8700	.5 oz
Leek	.25"	Aug	7	80	6	24	55+	row	11000	50
Lettuce	.25"	Jan-	3	75	10	20	120+	15	25000	plants
Melon	1"	June	4	80	36	36	55+	plants	1000	.25
Mustard	.25"	Apr-	8	75	6	12	85+	75	15000	OZ
Okra	1.5"	May	6	95	18	36	35+	plants	500	.25
Onions	.5"	Apr-	6	75	3	15	55+	6	8000	OZ
Peas	1.5"	July	6	75	5	36	90+	plants	120	.5 oz
Peppers	.5"	April-	8	85	24	24	60+	6	4500	.25
Pumpkins	3"	June	4	90	6	36	75+	plants	180	OZ
Radish	.5"	April-	4	85	2	20	90+	varies	2500	.5 oz
Spinach	.5"	May	5	70	6	16	30+	20'	2800	.25
Squash	1"	May-	4	95	36	36	45+	row	250	OZ
Strawberry	.125"	July	10	80	18	36	65+	10'	70000	2 oz
Tomatoes	.5"	March-	6	85	32	32	120+	row	11000	1 oz
Turnip	1.5"	May	3	85	3	24	70+	15'	15000	1 lb
		Feb-					45+	row	350	50

#### **Herb Planting Tips**



#### **Basil Tips**

There are many different kinds of basil to choose from for today's gardeners. They range from cinnamon, lemon, to purple basil used mostly for decoration. Choose a variety right for you and your needs as basil is only an annual and will have to be replanted every year. Basil can be grown indoors with the right conditions but is most often started indoors and then transplanted outdoors. Start your basil seeds indoors 6-8 weeks before last frost for your location. Drop a few seeds into each cell to ensure germination. Cover the seeds with a slight soil cover and dampen soil with a light watering. To speed up germination cover with a plastic top and place in a sunny location. Water twice a day and remove plastic top when seedlings emerge. Once two sets of leaves emerge basil can be transplanted into the garden. Pinch o the top two sets of leaves once the basil plant reaches reasonable height. This gives you a much higher quality plant. Suggest Varieties:

Italian – Great aromatic leaves and most popular basil variety.

Lemon – An aromatic basil with a great lemon -flavor.



#### Chive Tips

Chives are by far the easiest herb to grow in the home garden. They can be easily started by seed indoors or outdoors. Plant chive seeds about 1/4" in wet soil. Chive seeds will germinate best indoors in a dark spot until they begin to sprout. Then move to a location where they get some sun. Chives do well in soil temperatures 60-70 degrees. When the chives reach 6" tall they are ready to be transplanted to the garden. Find a location that has strong sunlight and rich soil, but will survive and almost any area. If you decide to directly sow chive seeds into the garden be sure to wait till after the last frost. The seeds may be slow to germinate until the soil warms up. Harvesting chives is just as easy as growing them. Once they reach 1 foot tall they are ready to be used. Cut o as much as you need. It is safe to cut o as much as half of the chive without harming the plant. The -flowers the chives produce are edible as well and can be added to your salad or decoration of many meals.

Suggested Varieties:

Common Chive – A wide plant that has an excellent onion -flavor.



#### **Dill Tips**

Dill is a tall, hardy herb plant that will grow as an annual in most locations. Dill is grown for both its leaves and seeds which can be used in many ways. One of the easier herbs to grow inside and outdoors. Can easily be grown in a container garden. When grown outdoors it is important to take two things into consideration. It grows tall so be sure to plant in a location that will not block other plants from receiving an adequate amount of sun. Also since it grows tall it can be damaged by high winds so try to find a location that blocks the wind. Plant dill directly where it will stay as it germinates quickly. Find a location that has plenty of sun. Cover the seed with 1/4" of soil and water soil generously. For best results the soil needs to be cultivated deep in order for the dill roots to strengthen properly. Plant seeds in the spring after your last frost date. To ensure a long harvest try planting seeds every few weeks. Suggested Varieties:

**Common** – Original dill plant with high essential oils. **Bouquet** – Easy to grow with -flavorful and unique foliage.



#### Mint Tips

Mint is another easy herb to grow and is perfect for the beginning gardener or anyone that loves mint. Mint grows very quickly and is a hardy perennial that can grow to over 3 feet in height. We suggest starting mint indoors with controlled conditions. Sow mint seeds 1/8" deep and cover with loose, moist soil. For best germination rates keep soil above 70 degrees. When the transplants are reasonable size and have been hardened o from the outside conditions bring them outside and plant anywhere from 12-24" apart depending on the variety requirements. Choose a location that has full to partial sun and mint will do well in almost any soil conditions. Mint leaves can be harvested at any times once that plant has established itself in your home garden. Try picking them in the morning hours when the oils tend to be strongest. Spread leaves out and dry in a cool, ventilated area.

Suggested Varieties:

**Spearmint** – Great scent used in sauces, teas, jellies, and sweets. **Peppermint** – Used in -flavoring peppermint candies and teas.



#### **Parsley Tips**

Parsley tends to grow best in the northern states of the country, but can be grown almost anywhere with the right care and location. Parsley can add beauty and taste to many meals. Parsley seeds are on the harder side to germinate when compared to most herb seeds. One of the best methods to increase germination is to soak your parsley seeds in warm water overnight. Be sure to change the water frequently, every 2 hours, as a growth inhibitor is released by the seeds! Sow the seeds in a seed starting medium and cover with 1/4" of soil. Keep the soil evenly moist and seeds will do best with a soil temperature of 70 degrees. Seed germination can take up to 14 days so be patient. Transplant seedlings when 6" in height and after your last frost date. Be sure to loosen soil deep into ground for health parsley plants. Depending on variety, but in general space plants 6-8" apart. Try protecting your parsley over the winter and it may reseed itself. Suggested Varieties:

Italian Leaf – Flat, dark leaves with pronounced fl-avor. Krausa – Dense, beautiful dark green leaves on strong stalks.



#### Sage Tips

Sage is a rewarding herb to grow as it can add some taste to any meal. Sage is an easy herb to grow from seed but can require some patience as sage seeds are slow germinators. Sage can be started indoors or outdoors but as always we recommend starting inside for better germination rates. Spread sage seeds over soil and cover with 1/8" of damp soil but not soaked. Not all seeds will germinate and the ones that do may take up to 6 weeks. Patience is key! When your Sage seeds have become seedlings and are ready to transplant into your home garden be sure to harden them o to the outside conditions. Sage plants prefer full sun and do best in well drained soils as they prefer to not have their roots remain wet. Allow for the soil to dry between waterings. Sage comes from hot, dry climates and will do best in southern states but can be grown throughout the states. Harvest biggest leaves first and pruning the top leaves early will entice a fuller, better producing Sage plant.

Suggested Varieties:

Common – Great herb for many dishes that include meat.

Variety	Planting Depth	Indoor Date	Outdoor Date	Soil Temp F°	Height"	Spread"	Days to Maturity	Soil	Light	Growth Type
Basil Catnip Chives Coriander Dill Lavender Lemon Grass Mint Oregano Parsley Rosemary Sage Stevia Thyme	1/2" 1/4" 3/8" 3/8" 1/2" 3/8" 1/2" 3/8" 1/4" 3/8" 1/4" 1/8" 1/8" 1/4"	6-8 6-8 8-10 N/A N/A 8-12 6-10 10-12 6-10 10-12 8-10 6-10 6-8 6-10	Anytime Anytime 3-4 before Anytime 4-5 before 1-2 before 2-3 before N/A Anytime 3-4 before Anytime 1-2 before 2-3 before 2-3 before 3-4 before 2-3 before 2-3 before 3-4 before 2-3 before 3-4 before 2-3 before 3-4 before 2-3 before 3-4 before 2-3 before 2-3 before 2-3 before 2-3 before 2-3 before 2-3 before 2-3 before 2-3 before 2-3 before 2-3 before 2-3 before 2-4 before 2-3 before 2-3 before 2-4 before 2-3 before 2-4 before 2-3 before 2-3 before 2-4 before 2-5 before 2-3 before 2-4 before 2-4 before 2-4 before 2-5 before 2-5 before 2-6 before 2-7 before	70 70 65 60 65 70 70 70 70 70 60 65 70	12-24 12-36 12-18 12-36 36-48 18-36 12-24 12-24 12-24 12-24 18-24 48-72 12-48 18-30 6-24	12 18 18 4 12 24 18 18 18 6-8 48 30 20 10	70 75 80 65 60 2 years 75 N/A 85 80 85 70 100 80	Rich, moist Rich Rich, moist Light Rich Well drained Rich Rich, moist Poor Rich Less acid Well drained Rich Fertile	Full Full Partial Full Partial Full Full Full Full Partial	Annual Perennial Annual Annual Perennial Perennial Perennial Perennial Perennial Perennial Perennial

#### **Flower Planting Tips**



#### **Coneflower Tips**

Coneflowers are some of the easiest and most rewarding flowers you can grow. They attract birds and butterflies and can be cut and brought inside where they last a long time. Coneflowers should be directly sowed outside into your flower garden. Spread your seeds 12-18" apart to give adequate space to fully grow. Cover seeds with 1/4" of moist garden soil. Coneflowers do well in almost any soil and tolerate dry soil conditions very well. Be sure to water them during really dry periods to keep growing healthy. Cone-flowers will do well when given a fertilizer once or twice a season. Coneflowers will grow to 24" to 42" tall and will form many branches. To encourage new blooms try cutting o- all the dead blooms. Coneflowers are a very hardy flower and will survive the first light frost. Cone- flowers reseed themselves and come back every year.

Suggest Varieties:

Purple – A sturdy perennial that will reseed itself. White Swan – Pure white petals with an orange-brown disk. Yellow – A beautiful coneflower that has bright yellow petals.



#### **Geranium Tips**

Geraniums are slow to germinate from seed, so be sure to start your seeds well ahead of your blooming expectations which could take 14-16 weeks from initial sowing. In order to increase germination rates, it helps to soak before sowing. A good method for geraniums is to dampen a few paper towels and fold over your geranium seeds. Place in a zip-lock bag and let sit for 24 hours. Plant a few seeds per pot in high quality soil at a depth of 1/2". Geranium seeds do not need light to germinate and should have a constant soil temperature of 70-75 degrees. To ensure adequate moisture be sure to cover pots with plastic until you notice green sprouts. When they begin to sprout open plastic to vent and place in good sunlight. Once two true leaves appear (the first leaves are seed leaves), remove from plastic cover. Allow seedling to grow for a couple weeks and then transplant each seedling into its own pot. Keep soil moist and supply 12 hours of sunlight a day. Pinch o- top of plant once it's growing strongly. This will promote branching and full growth.

Suggested Varieties: Elite Mix – True pack-blooming geraniums with rounded heads.



#### **Impatien Tips**

Growing Impatiens yourself is a great money saver and fun experience. The ideal time to plant your Impatien seeds is 10-12 weeks before the last frost date of your location. Fill your pots with sterile seed starting mix and wet the soil. Place two seeds in each pot and cover with 1/8" of soil. Once the seeds have been planted it is important to cover the pots with plastic bags to keep the moisture in. Impatiens need grow lights or indirect light from a window. The soil temperature should be 70-75 degrees for maximum germination. Impatiens can sprout in as little as 7 days but can take as long as two weeks. If the temperatures are cooler it could even take longer. Be sure to remove plastic wrap as soon as the seedlings germinate. Impatiens are susceptible to fungal disease so be sure not to over water. When plants are adequate size they can be transplanted into your flower garden. Wait until all danger of the last frost has passed and be sure to harden the Impatien plants before transplanting. Suggested Varieties:

Super Elfin – Tried and true variety that off-ers improved yield potential.



#### **Marigold Tips**

Marigold plants are beautiful and easy to grow throughout the United States. They come in a multiple of colors but orange being the most prevalant. Marigolds are easily grown from seeds in your flower garden. Marigolds can be grown inside 6-9 weeks before your last frost to get a jump start on the season. Starting indoors will ensure high germination and plant success. This also helps with proper spacing without the need to thin seedlings if directly sowed. After sowing seeds in soil cover lightly with 1/8" of moist soil. Be sure to water generously once after sowing. Seeds will germinate and grow quickly once sprouted. Give your Marigold plants at least 6" to "8 apart for dwarf varieties and a good 12" to 24" apart for Giant Marigolds. Marigolds love full sun and rich, well-drained soil. Add general purpose fertilizer once a month. Suggested Varieties: Petite Mix – A dependable flower for short season gardens **Crackjack** – Large blooms on tall stems with vibrant colors.



#### **Poppy Tips**

Poppy flowers are another flower garden favorite that grab attention and are fairly easy to propagate and care for. Poppies come in a variety of colors and sizes so find varieties that work best for your flower garden. Poppies can be started indoors or out. It depends when you want your flowers to bloom. Higher germination rates can be achieved with indoor sowing. Most poppy seeds should be sowed at 1/8" deep but some need light to germinate so be sure to read directions. Once sowed it is important to keep the soil moist but not soggy. It will take 10-15 days for your poppy seeds to germinate. Once they become seedlings begin to water every few days until transplant size. Space your poppy plants 6-8" apart for adequate spacing and growing room. When poppies die o- you can de-head them and save the seeds for the next growing seasons. You can also let them fall when ready and you will have poppies early the next season! They will need to be thinned as natural sowing does not o-er exact spacing.

Great Red – Very popular giant red poppy flower.



Rudbeckia Tips (Black Eyed Susan)

The Rudbeckia flower can be grown in almost every state. These bright yellow, daisy-like flowers can grow 24"-36" high and are excellent to use for indoor flower arrangements. These flowers can be started indoors or out. Its best to start indoors 6-8 weeks before the last frost date of your location. Cover with 1/4" of moist soil and water occasionally. When starting or transplanting outside choose a location that receives full sun. Rudbeckias are very hardy and can survive in almost any soil conditions. If direct sowing into your flower garden sow 2 weeks before the last frost date. The best way to extend the flower blooms is to remove the dead flowers which will help direct more nutrient to healthy blooms. Most Reudbeckias are perennials that will come back every year. Be sure to plant where they have adequate room to grow for years. Suggested Varieties:

Goldstrum – Popular flower with bright yellow petals and black center. Black Eyed Susan – A beautiful, upright flower that grabs your eye. Indian Summer – Golden-yellow single and semi-double large blooms.

## Annual Flowers

Variety	Indoor Sowing Date	Days to Max Germination	Soil Temp F°	Planting Depth	Weeks to Transplant	
Ageratum Alyssum Amaranthus Aster Bachelor Button Baby's Breath Celosia Coleus Cosmos Daisies Geraniums Impatiens Marigolds Moonflower Morning Glory Nasturtium Pansy Petunia Salvia	Dec-Mar Dec-Mar Dec-Mar Jan-Apr Feb-Mar Jan-Apr Dec-Mar Jan-Apr Feb-Mar Nov-Feb Dec-Mar Jan-Apr Feb-Mar Feb-Mar Feb-Mar Feb-Mar Feb-Mar Feb-Mar Feb-Mar Feb-Mar Dec-Mar Dec-Mar Dec-Mar Feb-Mar	7 8 14 8 8 8 10 10 5 8 4-10 15 7 8 8 8 8 8 16 10 15 6	75-78 78-82 68-70 70-75 68-70 68-72 70-80 70-75 68-72 70-75 68-72 70-75 68-72 70-75 68-72 70-80 70-75 70-74 55-65 70-80	1/8" 1/6" 1/2" 1/8" 1/4" 1/4" 1/4" 1/4" 1/4" 1/4" 1/4" 1/4	8-10 10-12 7-9 8 4-6 6-8 6 6-9 6 5-6 14-16 10-12 6-9 6-8 4-5 6 6 6-10 10 9 N/A	
Sunflower Sweet Pea Vinca Zinnias	Feb-Mar Dec-Mar Jan-Apr	8 15 7	70-75 70-80 68-72	1" 1/4" 1/8"	4-6 12 5-8	

## Perennial Flowers

Variety	Planting Depth	Indoor Sowing Date	Outdoor Sowing Date	Soil Temp F°	Height"	Spread"	Soil	Light
Achillea Black Eyed Susan Blanket Flower Buttery Flower Candytuft Coneflower Coreopsis Dahlia Daisies Delpinium Dianthus Foxglove Geraniums Hosta Hollyhock Lupine Penstemon Phlox Poppy Primrose Rudbeckia Tansy Viola	1/8" 1/4" 1/8" 1/8" 1/8" 1/4" 1/8" 1/8" 1/8" 1/8" 1/8" 1/8" 1/8" 1/8	6-8 N/A 6 6-8 6-8 N/A 6-8 N/A 6-8 N/A 6-10 6-10 6-10 6-10 6-10 6-8 N/A 6-8 6-8 6-8 6-8 6-8 N/A 6-8 6-8 6-8 N/A 6-8	Early Anytime 1-4 after 1-4 after Early Early 1-4 after Early Early 1-4 after Early Early 2-4 after 2-6 Early Anytime Early Anytime Early Early	$\begin{array}{c} 60\\ 60\\ 70\\ 70\\ 65\\ 70\\ 70\\ 65\\ 60\\ 60\\ 70\\ 65\\ 70\\ 70\\ 65\\ 70\\ 70\\ 60\\ 60\\ 60\\ 60\\ 60\\ 65\\ 65\\ \end{array}$	24-36" 24-40" 24-40" 24-36" 1-15" 24-42" 18-48" 12-36" 12-36" 12-48" 18-24" 24-60" 6-36" 24-40" 48-72" 24-36" 12-36" 6-18" 24-30" 8-15" 24-36" 36-48" 4-8"	18" 18" 14-16" 18-20" 8-10" 12-18" 6" 16-24" 8-20" 18" 10-12" 24" 6-20" 24-40" 18-24" 12-14" 18" 8-10" 8-18" 12-18" 12-24" 6" 6" 6"	Average, well- drained Average Loose Sandy, well- drained Well-drained Well-drained Moist Rich, fertile Rich, well-drained Average Rich, well-drained Average Any soil Well-drained Rich, well-drained Average Loose soil Rich, loose Any soil Rich, noist Average Average Average Average	Full Full Full Partial Full Full/Partial Full Full/Partial Full/Partial Full/Partial Full/Partial Full/Partial Full/Partial Full Full Full Full Full Full Full Fu