



**Virginia
Cooperative
Extension**

Virginia Tech
Virginia State University
www.ext.vt.edu

The Prince George Master Gardener Association
and Virginia Cooperative Extension



Invite you to join us for a virtual presentation:

“The Art of Growing Herbs”

With Billi Parus

Thursday, April 22, 2021

6:00PM-7:15PM (See Program Details Below)

You are invited to a Zoom meeting.

When: Apr 22, 2021 06:00 PM Eastern Time (US and Canada)

Register in advance for this meeting:

<https://virginiatech.zoom.us/meeting/register/tZAtcumhrz8uGNyPXokmeJIZPVofZbqWvyeM>

After registering, you will receive a confirmation email containing information about joining the meeting.

Program:



In this free program you will learn that herbs are easy plants to grow. They do equally well in gardens as they do in pots. They are the ideal patio & small space garden plant. We have twisted our almost “local” herb guru’s arm and she has agreed to share some of her secrets of successfully growing herbs in Central, Virginia. (Please find attached the supporting documents below.)

Bio: Billi Parus – Loves to cook and experiment with herbs, Maintains a large herb garden Teacher, Owner of an internet business, Lavender House, Member of Pioneer Unit of HSA, The Herb Society of the U.K., Master Gardener and Master Food Volunteer, 2009 Certificate of Achievement from The Herb Society of America.

Virginia Cooperative Extension programs and employment are open to all, regardless of age, color, disability, gender, gender identity, gender expression, national origin, political affiliation, race, religion, sexual orientation, genetic information, veteran status, or any other basis protected by law. An equal opportunity/affirmative action employer. If you are a person with a disability and desire any assistive devices, services or other accommodations to participate in this activity, please contact Scott Reiter, Prince George Unit, at 804-733-2686 (TDD*) during business hours of 8 a.m. and 5 p.m. to discuss accommodations 5 days prior to the event. *TDD number is (800) 828-1120.

GROWING HERBS

By Billi Parus

The Herb Society of America, Virginia Beach Master Gardener

Herbs come from the Mediterranean area where they grow in rocky soil and hot, dry conditions and tolerate total neglect. Herbs are shallow rooted plants. They thrive in the Tidewater area even though our high humidity is bothersome to some plants. Herbs can be planted anytime after the last frost date in the spring.

Location. Most herbs like full sun, so place them where the plants will receive at least 5 - 6 hours of sun a day. Make sure the water drains well in that area. If rain water stands in that area after a rainfall, that is not a good spot. The one requirement of all herbs is good drainage.... they do not like “wet feet”. Raised beds are a good solution to providing good drainage and saving your back. The second consideration when deciding location is to allow plenty of space for the mature herb plant’s full size. The plants need plenty of air circulating around them so they should not be crowded in too small of an area.

Soil. Good soil preparation is vital. Prepare the area thoroughly. Have the soil tested. Herbs need a PH of 6 - 7.5. Dig the soil to a 12” depth and incorporate lime, coarse builder’s sand, aged manure, peat moss, and compost (grass clippings and leaves). Work a little 5-10-5 fertilizer into the soil.

Planting. Spring/Fall. When planting the herbs, lift the plant out of the pot, spreading the roots before putting in the ground. Place the plant into the soil. Cover it well and water until the water no longer drains. You should add a little fertilizer at this time; fish emulsion or 5-10-5. After the water has completely drained, mulch your plants. When placing the plants in the soil, do not crowd them. Allow them plenty of space for growth and air circulation around the plants. Crowded plants will create a more humid environment, causing some humidity-sensitive plants to die.

Watering. Watering is unnecessary provided there is regular rain. If there is a draught or extremely hot temperatures, water about once every 4 or 5 days. Over watering could cause the plants to die as they are susceptible to root rot.

Fertilizing. Generally, herbs in the ground do not need to be fertilized. However, if the soil is not of good quality, a monthly fertilizing with Miracle Gro or organic fertilizer helps the plants.

Mulching. Mulching is very important because it helps to hold in the moisture during the summer. In our winters, mulch protects the herbs from our fluctuating temperatures. Some suggested mulches are grass clippings, pine straw. Sand or gravel are excellent mulches for the gray leafed herbs that are more susceptible to death from our humidity. Heat radiating up from the sand and gravel keep the underside and interior of the plant hot and dry.

Pruning. Pinch, prune, and harvest your herbs. They are meant to be used. Keep the flowers pinched off. Pruning helps your herbs grow into healthy, bushy plants. Never prune more than 1/3 of the plant at one time. Pruning more than that will over stress the plant, delaying return growth and possibly killing the plant. All parts of the plant that are pinched and pruned can be used in crafts and culinary creations.

Bugs. You rarely have bugs on outdoor plants. The only one that is present every year is “spittle” bug on your rosemary. These are easily removed with a strong spray of water.

CONTAINER GROWING - HERBS

By Billi Parus

The Herb Society of America, Virginia Beach Master Gardener

Growing herbs in containers requires a little bit more maintenance but is equally as satisfying as growing the plants in the ground. An added benefit is that the pots can come in during the winter for your herbal enjoyment all year long. Herbs can be potted both individually and in groupings in containers. All the basic requirements of the herbs must still be met with container growing.

Containers. The pot should be deep enough for the plant roots and must have drainage holes. Repot when necessary to accommodate plant growth. Plain clay pots are better than ceramic or plastic because they allow the plant to breathe and have much better drainage. Herbs do well in hanging pots also.

Soil. A porous, well-draining potting soil mixture is best for herbs in containers. A good potting soil should have equal parts of loam, milled peat, and coarse builder's sand, along with a handful of lime. If you purchase a garden-center potting soil, add the sand and perlite to make it more porous.

Planting. Water the plants thoroughly before planting. Make sure the container is clean before planting. Soak a clay pot in water first so it doesn't leach out the moisture in the potting soil during planting. Moisten the potting soil. Place pottery chips or gravel in the bottom of the pot, then fill with potting soil. Gently loosen the plant from its old pot, loosen and spread the roots, and place in the container, pushing down slightly. Fill in around the plant with potting soil and firm up the soil. Fill to just below the top of the pot. Water the plant.

Watering. Container-grown herbs require more frequent watering than those in the garden, about once every 3 or 4 days. Allow the plant soil to become dry to the touch between waterings. Water thoroughly until the soil is saturated and the water is running through the drainage holes. If the pot is in a saucer, drain off the extra water after 30 minutes....remember that herbs dislike "wet feet". Your container herbs will need more frequent watering the warmer the weather. During the winter months, indoor containers will need less frequent watering.

Fertilizing. Constant watering of the containers leaches the nutrients out of the container soil, so frequent fertilizing is required. Use a weak solution (1/4 of the manufacturer's recommendation) of a water soluble fertilizer every time you water. During the winter months, indoor containers need fertilizing about once every 2 - 3 weeks. Another effective means of fertilizing is the use of time released fertilizer mixed in with the soil or scattered on top of the soil. (Osmocote, Miracle Gro, Fish Emulsion, Rich Earth)

Sun. The container herbs need at least half a day of sunshine. The morning sun is better in the hot summertime. When the containers come inside, place them in a south facing window for the best light. If no sunlight is available, 14 - 16 hours per day under artificial light will usually be sufficient.

Bugs. When the containers are outside, there is rarely any need for insecticides. However, when the pots go inside, you may need to control insects. The most common are aphids (knock off with a strong spray of water or insecticidal soap), scale (insecticidal soap), spidermites and whitefly (spray both with insecticidal soap), and mealybug (spray with rubbing alcohol or insecticidal soap). You may do treatments with insecticidal soap and rubbing alcohol up to the day before harvest, but give your harvested cuttings a good rinse if you are going to use them in food.

When plants come inside for winter months, allow plenty of air circulation around them. Also be aware of the humidity around them. If you have a dry-heated house, supply them with some form of humidity.

A GARDEN FOR ALL SEASONS

☐ HERBS ☐

By Billi J. Parus

The Herb Society of America, Virginia Beach Master Gardener

Anyone who has grown an herb garden knows that it is a GARDEN OF ALL SEASONS, even winter months !! Herb plant flowers are fairly insignificant in size, so the plants are unique because of their foliage textures and colors, and their fragrance. Since most of the herb plants are perennial, you have colors year-round. Listed below are some of my favorite herbs, including their planting dates, foliage and flower colors, and when they bloom. You may need to adjust your plant schedule slightly to match your specific garden micro-climate.

Basil - A - green/purple foliage - white/purple pink flowers – **plant in May; blooms in July/Aug.**

Bee Balm - P - dull green foliage - many colors of flowers – **plant in April/May; blooms in July/Aug.**

Chamomile - A or P - bright green foliage - yellow/white - **plant in April/May; blooms June - Aug**

Dill - A,C - light green foliage - yellow flowers - **plant in April/May; blooms depends on when sown**

Chile Peppers - A - green foliage - white flowers/red peppers - **plant in April/May; blooms Fall**

Lovage - P - cool temps - green foliage - white/yellow flowers - **plant in April/May; blooms June/July**

Lavender - P - silver/gray/green foliage - white,blue,pink,lavender,purple - **plant in April/May; blooms June/July/Fall**

Parsley - B - bright green foliage - white flowers - **plant in April/May; blooms early Summer**

Rosemary - P - shades of green/variegated foliage - white,pink,blue, lavender,dark blue,dark purple flowers - **plant in April/May; blooms intermittent and Nov - Feb**

A = Annual; B = Biennial; P = Perennial; C = cool weather, usually self-seeds.

Bay Leaf - P - dark green foliage - tiny yellow flowers - **plant in April/May; blooms Spring**

Chives - P - blue green foliage - white / purple flowers - **plant in April/May; blooms June/Aug/Sept**

Cilantro - A,C - light green foliage - white/mauve flowers - **plant in April/May; blooms Summer**

Fennel - P - green or bronze wispy foliage - white flowers - **plant in April/May; blooms April – May**

Oregano - P - med/dark green foliage - white/pink/purple flowers - **plant in April/May; blooms July – Sept**

Lemon Balm - P - green or variegated foliage - yellow flowers - **plant in April/May; blooms June – Sept**

Mint - P - med/drk green/variegated foliage - white,blue,pink,lavender,purple flowers - **plant in April/May; blooms July/Aug**

Lemon Verbena - P - yellow green foliage - tiny white flowers - **plant in April/May; blooms Summer**

Scented Pelargoniums - tender P - light/drk green/variegated foliage - white, pink,rose,purple,red flowers - **plant in April/May; blooms blooms when cool**

Salad Burnet - P - blue/green foliage - green/purple flowers - **plant in April/May; blooms May - June**

Lamb's Ear - P - white/silver/grey foliage - rose/lavender flowers - **plant in April/May; blooms June**

Thyme - P - green/gray green/variegated foliage - white,pink,rose,lavender, red flowers - **plant in April/May; blooms June/July**

Borage - A - grey/green hairy foliage - white/blue flowers - **plant in April/May; blooms Summer**

Sage - P - gray/green foliage - white,blue,purple,red flowers - **plant in April/May; blooms May - June, Fall**

Horehound - P - light green foliage - white pompom flowers - **plant in April/May; blooms June – Aug**

Mexican Mint Marigold - P - replaces Tarragon in our humid/hot climate - green foliage - gold flowers - **plant in April/May; blooms July – Sept**

Chervil - A,C - green foliage - white umbel flowers – **plant in April/May; blooms June**

SUCCESSFUL HERB VARIETIES for VIRGINIA

By Billi J. Parus

The Herb Society of America, Virginia Beach Master Gardener

The herb varieties listed below are varieties that I successfully grow in the Tidewater area, but most will be successful in other areas of Virginia. Take this list with you when you are shopping for herbs, and look for and request these varieties for the best success in your herb garden.

BASIL – *Ocimum basilicum* - **Annual** - warm-weather, fragrant herb - mainstay in Italian cooking. Plant seeds or transplants after all danger of frost has passed and soil is warm. Keep harvesting the leaves to keep the plant going strong. It will die with first fall frost. **Varieties:** Sweet, African Blue, Cinnamon, Mrs. Burns Lemon, Red Rubin or Rubin (purple).

BAY LAUREL - *Laurus nobilis* – **Perennial** - Though in some Va. Zones this can be planted outside in a protected area, for most of the state, it should be planted in a container to be brought inside for winter.

BEE BALM - *Monarda* – **Perennial** – **hardy to -25°**. It can be invasive in the garden.

BORAGE – *Borago officinalis* - **Annual** – **hardy to 25°**.

BURNET or SALAD BURNET – *Sanguisorba minor* - **Perennial** – **hardy to -40°** - cucumber flavor.

CHAMOMILE - *Chamaemelum nobile* – **Perennial** – **hardy to -40°**.

CHERVIL - *Anthriscus cerefolium* – **Annual** – **hardy to 20°** - **cold weather herb** - spring & fall, die back in summer.

CHIVES – *Allium schoenoprasum*(onion) & *Allium tuberosum*(garlic) – **Perennial** – **hardy to -40°** - **cold weather herb** - planted in early spring. Prefer full sun. It does move around garden if flowers ripen & seeds scatter. It is easy to dig up & move. **Varieties:** Onion (purple flowers/"straw" shaped leaves) and Garlic (white flowers/grass blade shaped leaves – more invasive).

CORIANDER/ CILANTRO - *Coriandrum sativum* – **Annual** - **hardy to 25 - 30°** - **cold weather herb** - spring & fall, die back in summer. Plant in spring after last frost date. Prefer sunny site. Once flower is produced, shake the plant to get the seed to drop and it should return in the next cool season. Once flowers appear, the leaves are bitter tasting; however the seed is the spice coriander. Soap taste = aldehyde molecule.

DILL - *Anethum graveolens* - **Annual** – **hardy to 29-30°** - **cold weather herb** - spring & fall. Plant in full sun, well-draining soil. Self-seeds. If you are sowing seeds do this after last spring frost date. Plant more every couple of weeks to ensure a constant supply. Beneficial to insects.

FENNEL - *Foeniculum vulgare* – **Perennial** – **hardy to -10°** - Green, Bronze. Anise/licorice taste. Beneficial to butterfly catapillars.

HOREHOUND - *Marrubium vulgare* – **Perennial** – **hardy to -20°**. Spreading, does well with little water – Grey green.

LAVENDER – *Lavandula angustifolia* – **Perennial** – **hardy to 0°** - best planted in spring but can be planted in fall if plant is more mature. Plant for finished size. Does not like wet areas in garden. If pruning do in spring and after flowering. Mulch with coarse builder's sand, repeating several times throughout summer. **Varieties:** the English varieties (Munstead & Hidcote). The lavendins (*Lavandula x intermedia* - a cross between French & English lavenders better for humid areas) - Dutch, Provence, Fat Spike or Grosso, and Seal. In addition, the *Stoechas* varieties grow great.

LEMON BALM - *Melissa officinalis* – **Perennial** – **hardy to -20°** - both variegated and green – trim off flower heads before seeds scatter everywhere causing a weedy problem.

LEMON GRASS - *Cymbopogon citratus* – **Tender Perennial** – used in Eastern/Asian dishes.

LEMON VERBENA - *Aloysia citriodora* – **Tender Perennial** – **hardy to 25°** – the most intense lemon flavor in the herb world.

LOVAGE - *Levisticum officinale* - **Perennial** – **hardy to -35°** – this herb has a celery taste – dies back each winter to return in spring.

MARJORAM - *Origanum majorana* – **Tender Perennial – hardy to 30°** - low growing plant, great for edging or containers. Wait until after last spring frost to plant outside. They like sunny, sheltered spot in garden. Do not over water. Keep trimmed to encourage good growth. It has a sweet, mild oregano flavor.

MINT - *Mentha* – **Perennial** – vigorous & can be out of control in yard if not contained. Prefer some shade, moist but well-drained soil. Minimal care is needed except for CONTAINMENT! **Varieties:** Orange, Kentucky Colonel Spearment, Red Stem Apple Mint (the true *Mentha Gracilis*), Peppermint, Pineapple.

OREGANO - *Origanum x majoricum* – **Perennial - hardy to 10°** – love full sun. Easily started from seed or cutting, planted 6 - 10 weeks indoors before last spring frost. **Varieties:** Greek Mountain (sp. *Hirtum*), Italian, Herranhausen, Cuban Oregano (*plectrantha*).

PARSLEY - *Petroselinum crispum* – **Biennial** - flat leaf Italian, curly.

PEPPERS/CHILI PEPPERS – annuals - all varieties are very successful growers.

ROSEMARY - *Rosmarinus officinalis* – **Perennial – hardy to 20°** - Hill Hardy, Arp, Salem, Mrs. Reed's Dark Blue, Severn Seas, Miss Jessup, Nancy Howard, Tuscan Blue.

SAGE - *Salvia officinalis* – **Perennial – hardy to 0°** - Common, Berggarten, Purple, Golden, Tricolor, Pineapple.

SAVORY - *Satureja hortensis* - summer (**Annual**); *Satureja montana* - winter (**Perennial**).

SCENTED PELARGONIUMS - *Pelargonium* – **VERY TENDER Perennial – usually indoor for winter** - Frensham's Lemon, Apple, Coconut, Attar of Roses, Mabel Grey (lemon), Old- Fashioned Rose, Peppermint or Chocolate, Atomic Snowflake.

STEVIA – *Stevia rebaudiana* – **Very Tender Perennial** – sweet plant.

SWEET WOODRUFF - *Galium odoratum* – **Perennial – hardy to -35°** - shady location – used in beverages.

TARRAGON - *Artemisia dracunculus* 'Sativa' (French) – **“Particular” Perennial – culinary** – full sun, well-drained soil, no flowers. The 'Russian' tarragon is a 3' – 4' perennial shrub with bluish/purple flowers, but no culinary value.

TEXAS TARRAGON, MEXICAN MINT MARIGOLD - *Tagetes lucida* – **Perennial – hardy to 15°** - used as a substitute because tarragon sometimes “struggles” in humid climates.

THYME – *Thymus* – **Perennial – hardy to 0°** - French, Provençal, Lemon (both green & variegated), English, Orange balsam, Oregano.

Transplanting Herbs Outdoors – DeBaggio Herbs – printed with permission, with some editing.

Transplanting of new, tender plants requires conditioning to ready them for outdoor survival...this is called 'hardening off'. When outdoor temperatures are above 40°F, keep them outside in a partly sunny spot (direct sun can sometimes burn tender plant tissue) protected from wind. Bring the plants inside if temperatures are expected to drop below 40°F. After four to seven days of this regimen, the plants should be hardened enough to transplant outside. Less water should be given the plants during this treatment, but care should be taken to keep the plants from wilting. A weak solution of liquid fertilizer, applied to the plant at the time of transplanting, will also help get it off to a good start.

Early transplanting calls for attention to weather forecast. Danger of a frost or freeze means protecting the young transplants. Poly spun row covers (like Reemay) (4° improvement), Wall O' Water (10° improvement), home-made devices such as old plastic milk containers or styrofoam cups (with the bottoms removed); even an old sheet or blanket will also do in a pinch. A simple cold frame made from pvc pipes with clear heavy plastic over the top is a perfect protector. If it is needed for longer than a week, a heater inside the cold frame offers further protection.

MOST FREQUENTLY-ASKED “GROWING” QUESTIONS

By Billi J. Parus - The Herb Society of America, Virginia Beach Master Gardener

Before answering the other frequently-asked questions, **everyone always asks why are their herbs dying? The main thing that will kill your herbs is *TOO MUCH WATER* !! Do not over-water.** Water the herbs in your garden once a week, if we have had no rain. For the herbs you grow in containers, water once every 4-5 days, if we have had no water.

#1 - When do I plant my herbs? There are 3 times to remember. **For hardy perennials** = plant in the first half of September. **For cool-season annuals** – cilantro, dill, parsley = plant the end of February, first week of March. **For warm-season annuals** – basil, peppers = plant mid-May, first week of June. Adjust planting times for your growing area and micro-climate.

#2 - What herbs can grow in the shade? Part shade?

Shade = ginger, sweet woodruff, bee balm, witch hazel, lovage, lemon balm, lady’s mantle, sweet cicely, comfrey, violets, pennyroyal.

Part Shade = morning or late afternoon sun – chamomile, creeping oregano, chervil, costmary, salad burnet, lovage, mint, parsley, lambs ear, Vietnamese coriander, angelica, and tarragon.

#3 - Should I prune my herbs? Certainly prune your herbs to use. Regarding general pruning, do not prune back more than 1/3 into plant. In addition, no heavy pruning after mid-September. If you are planning on pruning in early spring, the end of February/first of March is the best time.

#4 - Can I bring my herbs in for the winter? You can but they will probably die. The tendency to over-water is the main killer when they come indoors. In addition, the humidity/dryness created by the heat system in the house will have an effect on the herbs. They need air movement around them (fan). They get more “bugs” indoors.

#5 - Why can’t I grow cilantro in the summer? Why does my cilantro die in the middle of the summer? Cilantro is a cool-weather plant that dies in summer heat. “Flick” the dried seed heads so the seeds drop to the soil. The plant will return in the fall when the weather cools down and again in the spring.

#6 - Why is my rosemary dying? Rosemary is greatly affected by too much watering. If the leaves are yellowing, the plant needs more nitrogen.

#7 - When I bring my rosemary inside, a fine dusty powder grows on the leaves. What is that? – That is called powdery mildew and is a result of too much humidity inside. First solution, leave the rosemary outside! To get rid of the powdery mildew, mix 1 Tblspn. baking soda with 1 quart of water and spray it on the plant weekly until the mildew is gone. This is the most gentle way to solve that problem; another solution is spraying on garden sulphur.

#8 - Why can’t I grow tarragon? Tarragon doesn’t like humidity – long, hot summer bad – tarragon needs cold winters. If you struggle with this, you are better off growing Mexican Mint Marigold (sold as tarragon in many grocery stores).

#9 - Why are my lavenders and sages “browning” out? The summer humidity kills grey-leaved plants like lavenders and sages. For sages, air-circulation around and under plant. For lavenders, you are better off growing lavendins, a cross between English & French lavenders. Some varieties are ‘Dutch’, ‘Provence’, ‘Grosso’, ‘Fat Spike’, ‘Seal’. Also the *Stoechas* varieties grow well here.

#10 - How do I grow mint without it going everywhere? If you grow it in the ground, it will spread. You need to grow it in a container. For long-term growing, routinely cut roots, rarely fertilize, and layer with compost & soil each year after cutting roots.

#11 - What are the “worms” on my parsley & fennel? These are black swallowtail butterfly caterpillars. Their main food sources are fennel, parsley, dill, and all members of the carrot family.

#12 - Why does my parsley “bolt”? – Parsley is a biennial plant, which means it will die at the end of 2 years. Before it starts to die, it will send up a tall shoot with flowers – this is called “bolting”. You need to replace your parsley.

Southern Exposure Seed Exchange

www.southernexposure.com

PO Box 460, Mineral, VA 23117
Phone 540.894.9480 Fax 540.894.9481
gardens@southernexposure.com

Check out our website www.southernexposure.com to see our selection of heirloom, open pollinated, organically and ecologically grown varieties. You can also sign up for our quarterly e-newsletter, packed with tips and ideas to keep your garden growing!



Recommended Planting Dates

	Seed, Bulb or Transplant	Mountains	Inland Plains	Coastal
Artichoke	TP	May 15-May 25	May 25-Jun 5	May 15-May 25
Beans, Bush	S	May 1-Aug 20	Apr 10-Jul 7, Jul 21-Sept 1	Apr 10-Jun 10, Aug 7-Sept 7
Beans, Pole	S	May 1-Jun 15	Apr 15-Jul 7, Jul 21-Sept 1	Apr 15-Jun 15
Beans, Lima	S	Jun 1-Jul 15	May 21-Jul 21	May 15-Jul 21
Beets	S	Mar 21-May 21, Jul 21-Aug 21	Mar 15-Apr 15, Aug 7-Sept 7	Mar 1-Apr 21, Aug 1-Sept 7
Broccoli	S	Jul 14-Aug 1	Jul 14-Aug 1	Jul 14-Aug 1
Broccoli	TP	Apr 15-May 21, Aug 1-Sept 7	Apr 7-May 15, Aug 7-Aug 21	Mar 15-Apr 21, Aug 7-Sept 1
Brussels Sprouts	S	Jun 7-Jul 15	Jun 7-Jul 15	Jun 7-Jul 15
Brussels Sprouts	TP	Apr 7-May 21, Jul 15-Aug 21	Apr 7-May 7, Jul 15-Aug 21	Mar 7-Apr-15, Jul 15-Aug 21
Cabbage	S	Jul 15-Aug 7	Jun 7-Jul 21	Jun 7-Aug 7
Cabbage	TP	Mar 21-May 15, Jul 7-Aug 15	Mar 15-May 7, Jul 1-Sept 1	Mar 1-Apr 21, Jul 7-Sept 15
Cabbage, Chinese	S	Apr 15-Aug 21	Apr 15-May 7, Jul 7-Aug 1	Apr 1-Jul 1, Jul 21-Sept 1
Carrots	S	Apr 7-May 21, Jul 21-Aug 21	Mar 7-Apr 21, Jul 21-Aug 21	Feb 27-Apr 7, Jul 21-Aug 21
Cauliflower	S	Jul 7-Aug 1	Jul 7-Jul 21	Jul 7-Jul 21
Cauliflower	TP	Apr 15-May 21, Jul 21-Aug 21	Apr 15-May 7, Aug 7-Sept 1	Mar 21-Apr 21, Aug 7-Aug 21
Collards	S	Jul 15-Aug 21	Aug 7-Sept 15	Aug 7-Sept 21
Corn, Sweet	S	May 21-Jul 21	Apr 21-Jul 15	Apr 15-Jun 21
Cucumbers	S	May 15-Jun 15, Jun 7-Aug 21	May 7-May 21, Jul 21-Aug 15	Apr 21-May 15, Jul 21-Aug 21
Eggplants	TP	May 1-Jun 21	Apr 21-May 21	Apr 15-May 21
Endive	S	May 7-May 21, Aug 1-Aug 21	Mar 15-Apr 15, Jul 21-Sept 15	Mar 7-Apr 15, Aug 21-Sept 21
Garlic	B	Aug 21-Oct 21	Sept 7-Nov 15	Sept 21-Nov 21
Kale	S	Mar 21-Apr 21, Jul 7-Sept 1	Mar 15-Apr 15, Jul 21-Sept 15	Mar 1-Apr 21, Jul 7-Sept 1
Kohlrabi	S	Apr 21-May 15	Mar 15-Apr 21	Mar 7-Apr 21
Lettuce, Bibb	S	Apr 5-May 21, Aug 7-Sept 1	Mar 7-Apr 21, Aug 21-Sept 10	Mar 7-Apr 1, Sept 7-Nov 7
Lettuce, Leaf	S	Mar 25-Apr 21, Aug 7-Sept 15	Mar 7-Apr 21, Aug 21-Sept 21	Feb 15-Apr 21, Sept 1-Nov 1
Muskmelons	S	May 1-Jun 15	May 1-Jun 7	Apr 21-May 21
Mustards	S	Mar 15-Apr 21, Aug 15-Sept 15	Mar 15-Apr 15, Sept 1-Nov 1	Mar 7-Apr 15, Sept 1-Nov 21
Okra	S	May 25-Jun 15	May 1-Jun 10	May 1-Jun 10
Onions	S	Mar 10-Mar 21	Mar 10-Mar 21, Sept 1-Oct 15	Feb 15-Apr 21, Sept 1-Oct 21
Onion, Multiplier	B	Mar 15-Apr 21, Sept 21-Nov 7	Mar 1-Apr 21, Sept 7-Dec 10	Feb 7-Mar 7, Sept 7-Dec 7
Peas	S	Mar 7-Apr 21, Jul 7-Aug 15	Mar 1-Apr 15	Feb 15-Apr 15
Peas, Southern	S	May 15-Jun 7	May 7-Jul 15	Apr 1-Jul 20
Peppers	S	May 15-Jun 15	May 7-Jun 21	Apr 15-Jun 21
Potatoes	S	Apr 7-May 21	Mar 7-Apr 21, Jul 15-Aug 15	Feb 15-Apr 15, Aug 7-Sept 1
Pumpkins	S	May 21-Jun 21	May 7-Jul 1	Apr 21-Jul 1
Radishes	S	Apr 7-May 1, Aug 15-Sept 15	Apr 1-Jun 15, Aug 15-Nov 1	Feb 21-May 7, Aug 21-Nov 15
Rutabaga	S	Mar 15-Apr 15	Aug 7-Aug 21	Aug 7-Sept 21
Spinach	S	Mar 7-Apr 1 Jul 21,-Aug 21	Feb 21-Apr 21, Aug 15-Oct 25	Feb 1-Apr 1, Aug 21-Nov 15
Squash, Summer	S	May 15-Jul 1	May 1-Jun 15	Apr 21-Jun 7
Squash, Winter	S	May 7-Jun 15	May 1-Jun 15	Apr 21-Jun 7
Sunflowers	S	May 7-Jun 21	Apr 15-Jul 7	Apr 15-Jul 7
Sweet Potatoes	B	May 15-Jul 1	May 7-Jun 21	Apr 21-Jun 15
Swiss Chard	S	Apr 15-May 7	Mar 7-Jun 21	Mar 1-May 7
Tomatoes	TP	May 21-Jun 15	Apr 21-Jun 21	Apr 15-Jul 7
Turnips	S	Mar 15-Apr 15, Jul 15-Aug 21	Mar 7-Apr 7, Aug 7-Sept 21	Feb 21-Mar 21, Aug 15-Oct 15
Watermelons	S	May 21-Jun 21	May 7-Jun 7	May 1-May 21

We have found the above listed dates to be the easiest times to plant here in the Mid-Atlantic region. Appropriate dates may vary for your region and micro-climate.



Virginia's Home Garden Vegetable Planting Guide: Recommended Planting Dates and Amounts to Plant

Authored by Alex Hessler, Instructor, Organic and Sustainable Vegetable Production and Director, Homefield Farm, School of Plant and Environmental Sciences

Selecting appropriate planting dates is a critical component of successful vegetable gardening. Vegetables vary widely in their preferred growing conditions and tolerance to temperature extremes, both cold and hot. Understanding the local frost-free period aids in selecting appropriate planting dates. This publication uses U.S. Department of Agriculture Plant Hardiness Zones for guidance in selecting planting dates for spring- and fall-planted vegetables for the home garden in Virginia.

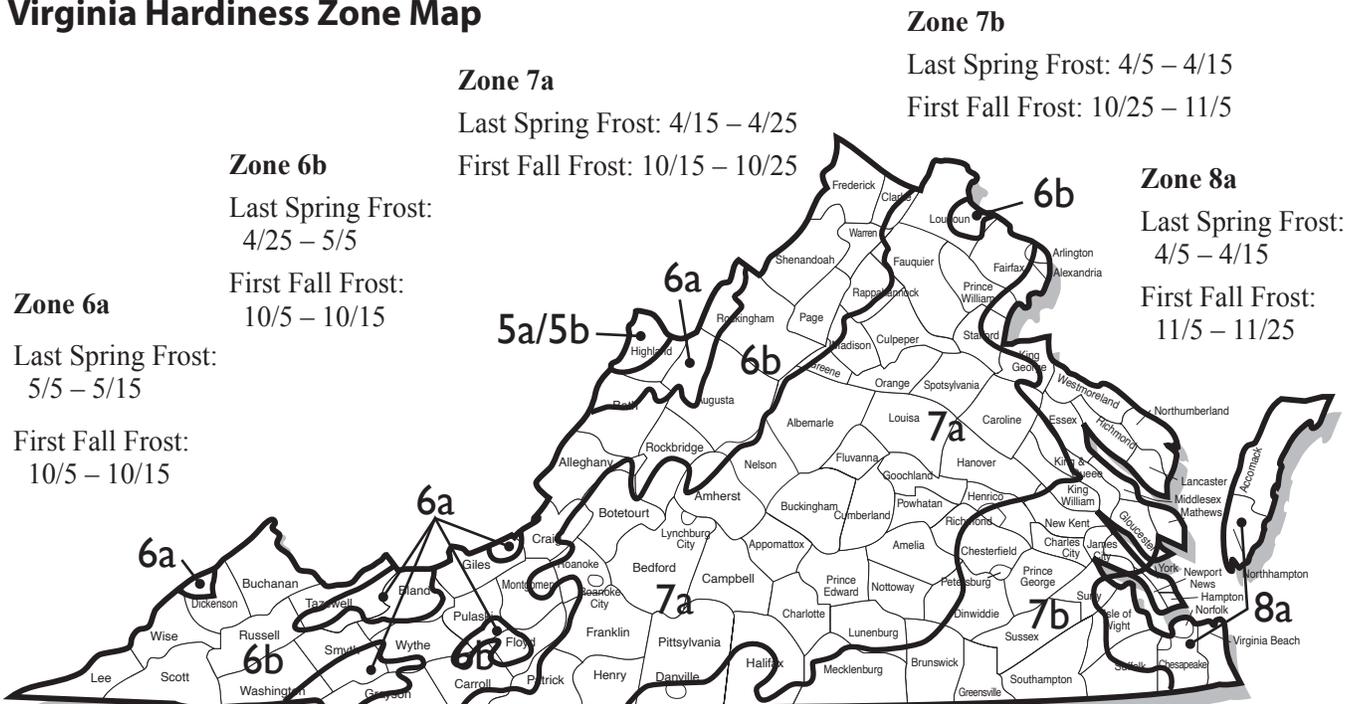
In addition, this guide suggests approximate amounts of each crop to plant based on family size and preferences, along with guidelines on plant spacing and the amount of seed or number of plants needed per 10 feet of row.

When to Plant

See the Virginia Hardiness Zone map below to identify your area's USDA hardiness zone. The map indicates the average last spring frost and first killing frost date for each hardiness zone.

Refer to the Recommended Planting and Harvest Date chart labeled for your USDA hardiness zone to find recommended planting periods and anticipated harvest periods for various crops.

Virginia Hardiness Zone Map



Recommended Planting and Harvest Dates

Hardiness Zone 6a

Recommended Planting and Harvest Dates

Refer to the legend at the bottom of the chart to determine when it is appropriate to plant and harvest each vegetable, based on the last and first killing frost date for your region. Actual last and first killing frost dates will vary due to local conditions and yearly temperature fluctuations. Planting and harvest periods are represented as a 10-day range. You may wish to favor earlier or later planting dates within the given range based on local data or experience.

Note: The use of row cover fabric and cold frames may extend the expected planting and harvest window by two to four weeks in the spring and fall.

Crop	Last Spring Frost: 5/5 - 5/15														First Fall Frost: 10/5 - 10/15																																							
	2/5	2/15	2/25	3/5	3/15	3/25	4/5	4/15	4/25	5/5	5/15	5/25	6/5	6/15	6/25	7/5	7/15	7/25	8/5	8/15	8/25	9/5	9/15	9/25	10/5	10/15	10/25	11/5	11/15	11/25	12/5	12/15	12/25	1/5	1/15	1/25	2/5	2/15	2/25															
Asparagus***						x	x	x	x	0	0	0	0	0	0	0																																						
Beans, bush										x	x	x	x	x	#	#	#	#	0	0	0	0	0	0	0	0	0																											
Beans, pole										x	x	x	x	x	x	0	0	0	0	0	0	0	0	0	0	0	0																											
Beans, lima											x	x	x	x	x	x			0	0	0	0	0	0	0	0																												
Beets						x	x	x	x	x				0	0	0	0	0	x	x	x	x		0	0	0	0	0	0																									
Broccoli*							x	x	x	x	x			0	0	0	#	#	x	x				0	0	0	0	0																										
Brussels Sprouts*																x	x	x								0	0	0	0																									
Cabbage*							x	x	x	x	x	0	0	0	0	0	#	x	x	x					0	0	0	0	0																									
Chinese Cabbage*							x	x	x	x	x			0	0	0	#	x	x	x					0	0	0	0	0																									
Carrots						x	x	x	x	x		0	0	0	0	#	#	#	0					0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0							
Cauliflower*							x	x	x					0	0	#	x	x	x						0	0	0	0	0																									
Chard, Swiss							x	x	x	x	x	#	0	0	0	0	0	0	#	#	#	#	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0						
Collards, Kale						x	x	x	x	x	#	0	0	0	0	0	x	x	x	x	x			0	0	0	0	0	0																									
Cucumbers										x	x	x	x	x	#	#	0	0	0	0	0	0	0	0	0	0	0	0																										
Eggplant*										x	x	x	x	x	x	x	0	0	0	0	0	0	0	0	0	0	0																											
Kohlrabi						x	x	x	x	x		0	0	0			x	x	x	x	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0					
Leeks*							x	x	x	x					0	0	#	#	x	x							0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Lettuce, head*							x	x	x	x	x	#	0	0	0	0	x	x	x	x	#	0	0	0	0	0	0																											
Lettuce, baby salad							x	x	x	x	#	#	0	0	0	0		x	x	x	#	#	0	0	0	0	0																											
Muskmelons										x	x	x	x	x	x	0	0	0	0	0	0	0	0	0	0	0	0																											
Mustard						x	x	x	x	#	#	0	0	0	0	0		x	x	x	x	#	#	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0					
Okra										x	x	x	x	x	x			0	0	0	0	0	0	0	0	0	0																											
Onion (bulbing)**						x	x	x	x	x					0	0	0	0	0	0																																		
Peas, garden						x	x	x	x		0	0	0	0	0																																							
Peppers*										x	x	x	x	x	x	x	0	0	0	0	0	0	0	0	0	0	0	0																										
Potatoes						x	x	x	x	x	x		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0																										
Pumpkins										x	x	x	x	x				0	0	0	0	0	0	0	0	0	0																											
Radish						x	x	x	x	#	#	0	0	0	0				x	x	x	#	#	0	0	0	0	0																										
Rutabega																x	x	x								0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Southern Pea											x	x	x	x	x				0	0	0	0	0	0	0	0	0																											
Spinach						x	x	x	x	#	0	0	0	0	0					x	x	x	#	#	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Squash, summer										x	x	x	x	x	#	#	#	#	#	0	0	0	0	0	0	0	0																											
Squash, winter										x	x	x	x	x	x			0	0	0	0	0	0	0	0	0	0																											
Sweet Corn										x	x	x	x	x	x	#	0	0	0	0	0	0	0	0	0	0	0																											
Sweet Potato											x	x	x	x	x									0	0	0	0																											
Tomatoes*										x	x	x	x	x	x	#	0	0	0	0	0	0	0	0	0	0	0																											
Turnips							x	x	x	x		0	0	0				x	x	x	x	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Watermelon										x	x	x	x	x				0	0	0	0	0	0	0	0	0	0																											

x = Planting Period; 0 = Harvest Period; # = Plant and Harvest Period
 * = Transplant; ** = Set or Seed; *** = Do not harvest asparagus in first year

Hardiness Zone 6b

Recommended Planting and Harvest Dates

Refer to the legend at the bottom of the chart to determine when it is appropriate to plant and harvest each vegetable, based on the last and first killing frost date for your region. Actual last and first killing frost dates will vary due to local conditions and yearly temperature fluctuations. Planting and harvest periods are represented as a 10-day range. You may wish to favor earlier or later planting dates within the given range based on local data or experience.

Note: The use of row cover fabric and cold frames may extend the expected planting and harvest window by two to four weeks in the spring and fall.

Crop	Last Spring Frost: 4/25 - 5/5										First Fall Frost: 10/5 - 10/15																																
	2/5	2/15	2/25	3/5	3/15	3/25	4/5	4/15	4/25	5/5	5/15	5/25	6/5	6/15	6/25	7/5	7/15	7/25	8/5	8/15	8/25	9/5	9/15	9/25	10/5	10/15	10/25	11/5	11/15	11/25	12/5	12/15	12/25	1/5	1/15	1/25	2/5	2/15	2/25				
Asparagus***						x	x	x	#	0	0	0	0	0	0																												
Beans, bush									x	x	x	x	x	#	#	#	#	0	0	0	0	0	0	0	0	0																	
Beans, pole									x	x	x	x	x	x	#	0	0	0	0	0	0	0	0	0	0	0																	
Beans, lima										x	x	x	x	x	x	x	0	0	0	0	0	0	0	0	0	0																	
Beets					x	x	x	x	x			0	0	0	0	0		x	x	x	x		0	0	0	0	0	0	0														
Broccoli*						x	x	x	x	x		0	0	0	0	#	x	x	x					0	0	0	0	0															
Brussels Sprouts*																x	x									0	0	0	0														
Cabbage*						x	x	x	x	x	0	0	0	0	0	0	x	x	x	x					0	0	0	0	0														
Chinese Cabbage*						x	x	x	x	x		0	0	0	0	x	x	x	x					0	0	0	0	0															
Carrots					x	x	x	x	x		0	0	0	0	0	#	#	#	0				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Cauliflower*						x	x	x				0	0	0		x	x	x						0	0	0	0	0															
Chard, Swiss					x	x	x	x	x	x	0	0	0	0	0	0	#	#	#	#	#	0	0	0	0	0	0	0	0														
Collards, Kale				x	x	x	x	x	x	0	0	0	0	0	0		x	x	x	x	x		0	0	0	0	0	0															
Cucumbers									x	x	x	x	x	#	#	#	0	0	0	0	0	0	0	0	0	0																	
Eggplant*									x	x	x	x	x	x	x	0	0	0	0	0	0	0	0	0	0	0																	
Kohlrabi					x	x	x	x	x		0	0	0	0				x	x	x	x	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Leeks*						x	x	x	x			0	0	0	#	#	x	x								0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Lettuce, head*						x	x	x	x	x	#	0	0	0	0		x	x	x	x	#	0	0	0	0	0	0																
Lettuce, baby salad						x	x	x	x	#	#	0	0	0	0				x	x	x	#	#	0	0	0	0																
Muskmelons									x	x	x	x	x	x	x	0	0	0	0	0	0	0	0	0	0	0																	
Mustard				x	x	x	x	#	#	0	0	0	0	0				x	x	x	x	#	#	0	0	0	0	0	0	0													
Okra									x	x	x	x	x	x	x	0	0	0	0	0	0	0	0	0	0	0																	
Onion (bulbing)**				x	x	x	x	x	x			0	0	0	0	0	0	0																									
Peas, garden				x	x	x	x			0	0	0	0	0																													
Peppers*									x	x	x	x	x	x	#	0	0	0	0	0	0	0	0	0	0	0	0																
Potatoes					x	x	x	x	x	x	x	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0																	
Pumpkins									x	x	x	x	x	x				0	0	0	0	0	0	0	0	0																	
Radish				x	x	x	x	#	#	#	0	0	0					x	x	x	#	#	0	0	0	0	0	0															
Rutabega																x	x	x								0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Southern Pea										x	x	x	x	x	x	0	0	0	0	0	0	0	0	0	0	0																	
Spinach				x	x	x	x	#	0	0	0	0	0							x	x	x	#	#	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Squash, summer									x	x	x	x	#	#	#	#	#	#	0	0	0	0	0	0	0	0																	
Squash, winter									x	x	x	x	x	x	x	0	0	0	0	0	0	0	0	0	0	0																	
Sweet Corn									x	x	x	x	x	x	#	#	0	0	0	0	0	0	0	0	0	0																	
Sweet Potato										x	x	x	x	x									0	0	0	0																	
Tomatoes*									x	x	x	x	x	x	#	#	0	0	0	0	0	0	0	0	0	0																	
Turnips					x	x	x	x	x		0	0	0	0					x	x	x	x	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Watermelon										x	x	x	x	x	0	0	0	0	0	0	0	0	0	0	0	0																	

x = Planting Period; 0 = Harvest Period; # = Plant and Harvest Period
 * = Transplant; ** = Set or Seed; *** = Do not harvest asparagus in first year

Hardiness Zone 8a

Recommended Planting and Harvest Dates

Refer to the legend at the bottom of the chart to determine when it is appropriate to plant and harvest each vegetable, based on the last and first killing frost date for your region. Actual last and first killing frost dates will vary due to local conditions and yearly temperature fluctuations. Planting and harvest periods are represented as a 10-day range. You may wish to favor earlier or later planting dates within the given range based on local data or experience.

Note: The use of row cover fabric and cold frames may extend the expected planting and harvest window by two to four weeks in the spring and fall.

Crop	Last Spring Frost: 4/5 - 4/15															First Fall Frost: 11/5 - 11/25																															
	2/5	2/15	2/25	3/5	3/15	3/25	4/5	4/15	4/25	5/5	5/15	5/25	6/5	6/15	6/25	7/5	7/15	7/25	8/5	8/15	8/25	9/5	9/15	9/25	10/5	10/15	10/25	11/5	11/15	11/25	12/5	12/15	12/25	1/5	1/15	1/25	2/5	2/15	2/25								
Asparagus***				x	x	x	#	0	0	0	0	0	0																																		
Beans, bush							x	x	x	x	x	#	#	#	#	#	#	#	#	#	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Beans, pole								x	x	x	x	x	#	#	#	#	#	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Beans, lima									x	x	x	x	x	x	x	#	#	#	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Beets			x	x	x	x	x	x		0	0	0	0	0								x	x	x	x			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Broccoli*				x	x	x	x	x			0	0	0	0	0							x	x	x	x			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Brussels Sprouts*																							x	x									0	0	0	0	0	0	0	0	0	0	0				
Cabbage*				x	x	x	x	x	0	0	0	0	0	0								x	x	x			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Chinese Cabbage*				x	x	x	x	x			0	0	0	0								x	x	x	x			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Carrots			x	x	x	x	x		0	0	0	0	0	0	0				x	x	x	x	x			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Cauliflower*				x	x	x				0	0	0										x	x	x				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Chard, Swiss			x	x	x	x	x	x	0	0	0	0	0	0	0	0	0	0	0	0	0	#	#	#	#	#	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Collards, Kale	x	x	x	x	x	x	x	0	0	0	0	0	0									x	x	x	x	x		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Cucumbers							x	x	x	x	x	#	#	#	#	#	#	#	#	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Eggplant*							x	x	x	x	x	x	#	#	#	#	#	#	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Kohlrabi			x	x	x	x	x		0	0	0	0											x	x	x	x	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Leeks*				x	x	x	x				0	0	0	0	0							x	x	x	x							0	0	0	0	0	0	0	0	0	0	0	0	0			
Lettuce, head*				x	x	x	x	x	#	0	0	0	0										x	x	x	x	#	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Lettuce, baby salad					x	x	x	x	#	#	0	0	0	0									x	x	x	#	#	#	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Muskmelons							x	x	x	x	x	x	#	#	#	#	#	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Mustard	x	x	x	x	#	#	0	0	0	0	0												x	x	x	x	#	#	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Okra							x	x	x	x	x	x	x	#	#	#	#	#	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Onion (bulbing)**			x	x	x	x	x	x			0	0	0	0	0	0	0																														
Peas, garden			x	x	x	x			0	0	0	0																																			
Peppers*							x	x	x	x	x	x	#	#	#	#	#	#	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Potatoes			x	x	x	x	x	x	x	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Pumpkins							x	x	x	x	x	x	x	#	#	#	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Radish	x	x	x	x	#	#	#	0	0	0													x	x	x	#	#	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Rutabega																							x	x	x				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Southern Pea (Cowpeas)								x	x	x	x	x	x	#	#	#	#	#	#	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Spinach	x	x	x	x	#	0	0	0	0	0														x	x	x	#	#	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Squash, summer							x	x	x	x	#	#	#	#	#	#	#	#	#	#	#	#	#	#	#	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Squash, winter							x	x	x	x	x	x	#	#	#	#	#	#	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Sweet Corn						x	x	x	x	x	x	#	#	#	#	#	#	#	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Sweet Potato							x	x	x	x	x	x	x	x	x	x	x	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tomatoes*							x	x	x	x	x	#	#	#	#	#	#	#	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Turnips			x	x	x	x	x		0	0	0	0											x	x	x	x	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Watermelon							x	x	x	x	x	x	#	#	#	#	#	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

x = Planting Period; 0 = Harvest Period; # = Plant and Harvest Period
 * = Transplant; ** = Set or Seed; *** = Do not harvest asparagus in first year

How Much to Plant

How much of each crop to plant is determined by many factors, including your vegetable preferences, the size of your garden, and the time and energy you can devote to maintaining it. The age, lifestyle, and cooking habits of your family influence how much of each vegetable you should grow. You may want to grow more of a certain crop if you plan on canning or freezing.

How Much to Plant

Crop	Distance between plants in row	Distance between rows	Approximate amount of seed/transplants for 10' row	Approximate yield per 10' row	Approximate number of plants per person per planting	Number of Plantings Spring/Summer	Number of Plantings Fall
Asparagus	12-18"	36-48"	10 crowns	3-4 lbs	5-10	1	
Beans, bush	1-3"	24-36"	1 oz seed	3-5 lbs	10	4	
Beans, pole	4-12"	36-48"	1 oz seed	6-10 lbs	3-5	2	
Beans, lima	3-6"	24-36"	1 oz seed	4-6 lbs	4-8	1	
Beets	2-3"	12-18"	1/8 oz seed	8-10 lbs	10-20	2	2
Broccoli	12-24"	18-36"	10 transplants	4-6 lbs	3-5	2	3
Brussels Sprouts	18-24"	30-36"	7 transplants	3-5 lbs	2-5		1
Cabbage	12-18"	18-36"	10 transplants	10-25 lbs	4-8	1	2
Chinese Cabbage	4-30"	18-36"	10 transplants	20-30 lbs	6-8	1	2
Carrots	thin to 1.5-2"	6-12"	1/20 oz seed	7-10 lbs	10-30	1	2
Cauliflower	12-24"	24-36"	10 transplants	8-10 lbs	3-5	1	2
Chard, Swiss	6-12"	18-30"	1/5 oz seed	8-12 lbs	3-5	1	2
Collards, Kale	12-24"	18-36"	10 transplants	4-8 lbs	3-7	1	2
Cucumbers	12-18"	48-72"	10 transplants	8-10 lbs	2-4	2-3	
Eggplant	18-24"	30-42"	7 transplants	10-12 lbs	1-3	1	
Kohlrabi	4-6"	12-36"	30 transplants	4-8 lbs	3-6	1	2
Leeks	4-6"	12-30"	1/10 oz seed	5-10 lbs	10-12	1	1
Lettuce, head	6-10"	10-18"	20 transplants	2-4 lbs	5-10	3	3
Lettuce, baby salad	0.2-0.4"	6-12"	1/4 oz seed	2-4 lbs	10-15 feet of row	2	3
Muskmelons	24-36"	60-90"	5 transplants	15-25 lbs	2-3	2	
Mustard	1-2" thin to 6"	18-30"	1/10 oz seed	3-6 lbs	5-10	1	2
Okra	12-18"	36-48"	15 transplants	5-10 lbs	3-5	2	
Onions (bulbing)	2-4"	12-18"	60 transplants	7-10 lbs	20-30	1	
Peas, garden	2-3"	12-30"	1/2 oz seed	2-6 lbs	20-30	2	
Peppers	12-24"	30-36"	10 transplants	5-18 lbs	3-5	2	
Potatoes	10-18"	24-42"	1 lb	10-20 lbs	10	1	
Pumpkins	2-4'	5-8'	1/20 oz seed	10-20 lbs	1	1	
Radish	3/4-1"	6-12"	1/8 oz seed	3-5 lbs	2 feet of row	2	4
Rutabaga	3-6"	12-30"	1/8 oz seed	8-12 lbs	10-20		1
Southern Peas (Cowpeas)	3-4"	24-36"	1 oz seed	5-18 lbs	20-30	1	
Sweet Corn	6-12"	24-36"	1/2 oz seed	7-10 lbs	15-20	3-5	
Spinach	0.5-1" thin to 4"	6-12"	1/8 oz seed	4-6 lbs	15	2	2
Squash, summer	18-36"	36-60"	1/10 oz seed	20-80 lbs	1-2	3	
Squash, winter	2-4'	3-10'	1/10 oz seed	10-80 lbs	1-2	1	
Sweet Potato	9-12"	30-48"	15 slips	8-12 lbs	5	1	
Tomatoes	18-36"	36-50"	7 transplants	15-45 lbs	2-4	2	
Turnips	2-3"	12-24"	1/8 oz seed	8-12 lbs	10-20	1	1
Watermelons	3-4'	5-10'	3 transplants	8-40 lbs	2	2	

The “How Much to Plant” chart provides recommendations for the number of plants to grow per person for each vegetable based on expected yield. Consider that children may require half the amount of vegetables as adults. Some crops provide a continuous harvest throughout the season, while others are harvested only once or twice. For certain crops, you may wish to do multiple plantings spaced every two to three weeks during the planting window to achieve a continuous harvest. This chart indicates the number of plantings recommended for each crop during the spring/summer and fall planting windows. Varieties with different days to maturity can also be used to extend the harvest season.

This chart also includes recommended plant spacing and number of seeds or plants required per 10 feet of row. Setting plants in a straight row makes planting and weeding easier. Exactly how wide you space your rows depends on the dimensions of your garden beds and the size of the hand tools or power tools you use to control weeds between rows. Space plants closer together in the row when using wider spacing between rows and farther apart when using closer spacing between the rows.

Example for Using this Publication: Broccoli

A gardener living in central Virginia refers to the Recommended Planting and Harvest Date Chart for hardiness zone 7a. She is interested in having fresh broccoli from the garden for her family of four in the spring and fall. The spring planting window is March 15 through May 5, and the fall planting window is July 25 through Sept. 5. She sees that the chart suggests transplanting broccoli rather than direct seeding. She intends to plant two plantings two weeks apart in the spring and three plantings two weeks apart in the fall to provide a consistent supply of broccoli for the table.

The recommended number of plants per planting per person is three to five. She will plant four plants for each adult and two for each of her two children, for a total of twelve plants per planting. Since she is planting her rows 36 inches apart to allow her to rototill weeds between the rows, she will use the narrow in-row spacing of 12 inches. Twelve plants spaced 12 inches apart will require 12 feet per planting.

Additional Resources

Additional resources are available from Virginia Cooperative Extension to assist in planning, planting, and maintaining the home garden:

“Planning the Vegetable Garden,” VCE Publication 426-312 <https://www.pubs.ext.vt.edu/426/426-312/426-312.html>

“Vegetable Gardening in Containers,” VCE Publication 426-336 <https://www.pubs.ext.vt.edu/426/426-336/426-336.html>

Publications on a wide variety of individual crops and garden pests can be found on the VCE publications website: <https://www.pubs.ext.vt.edu/>

This publication was originally authored by Diane Relf, Extension horticulturist (retired) and Alan McDaniel, associate professor (deceased), Department of Horticulture, Virginia Tech.

Visit our website: www.ext.vt.edu

Produced by Virginia Cooperative Extension, Virginia Tech, 2019

Virginia Cooperative Extension programs and employment are open to all, regardless of age, color, disability, gender, gender identity, gender expression, national origin, political affiliation, race, religion, sexual orientation, genetic information, veteran status, or any other basis protected by law. An equal opportunity/affirmative action employer. Issued in furtherance of Cooperative Extension work, Virginia Polytechnic Institute and State University, Virginia State University, and the U.S. Department of Agriculture cooperating. Edwin J. Jones, Director, Virginia Cooperative Extension, Virginia Tech, Blacksburg; M. Ray McKinnie, Administrator, 1890 Extension Program, Virginia State University, Petersburg.

VT/1119/SPES-170