



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

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Introduction

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 2023 USDA Plant Hardiness Zone Map: Virginia (fig. 1) to identify your area's hardiness zone. A searchable map with hardiness zones for specific locations is available at <https://planthardiness.ars.usda.gov>.

Virginia's mountainous topography creates a diversity of hardiness zones over a small area. For example, Roanoke County has four different hardiness zones with a 30-day planting difference between them. In addition, microclimates including south slopes will be warmer, and north slopes will be cooler. Adjust according to your specific location and experience.

The first and last average fall and spring freeze dates are listed in table 1. Specific information by county can be found at the Midwestern Regional Climate Center website (<https://mrcc.purdue.edu/freeze/freezeatool>).

Refer to the recommended planting date table for your USDA hardiness zone (tables 2-4) to find recommended planting periods for various crops.

Table 1. Date ranges for average (50% chance) last spring frost and first fall frost for hardiness zones 6a through 8b.

Zone	Last spring frost	First fall frost
6a	May 5-15	Oct 5-15
6b	April 25-May 5	Oct 5-15
7a	April 15-25	Oct 15-25
7b	April 5-15	Oct 25-Nov 5
8a	April 1-15	Nov 1-15
8b	March 15-April 1	Nov 15-25

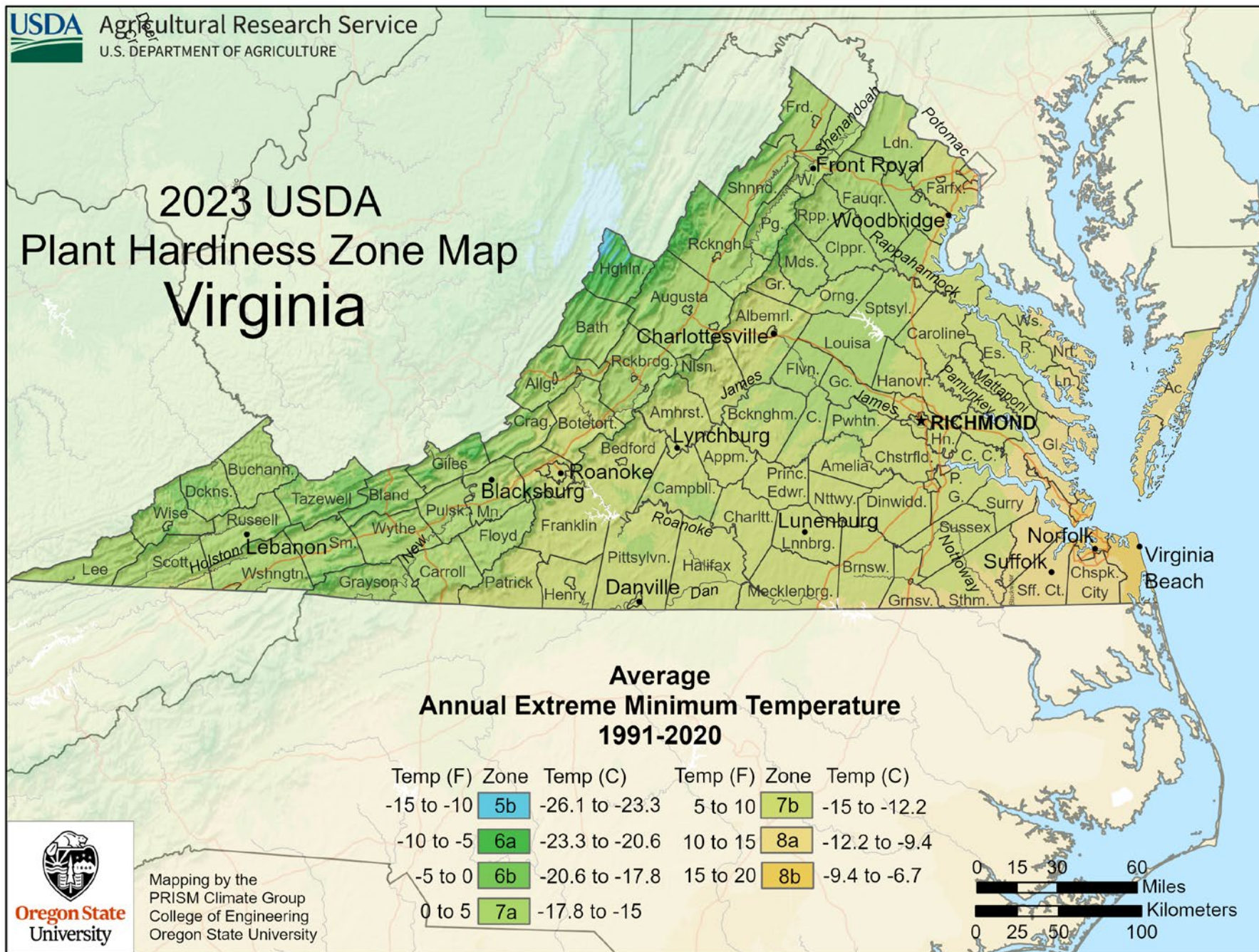


Figure 1. 2023 USDA Plant Hardiness Zone Map of Virginia.

Recommended Planting and Harvest Dates

Hardiness Zone 6a and 6b

Actual last and first killing frost dates will vary due to local conditions and yearly temperature fluctuations. 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.

Table 2. Recommended planting date ranges by crop for hardiness zones 6a and 6b.

Crop	Zone 6a Spring	Zone 6a Fall	Zone 6b Spring	Zone 6b Fall
Asparagus ¹	April 1-May 1	not recommended	April 1-May 1	not recommended
Beans, lima	May 20-June 20	June 20-July 10	May 10-June 20	June 20-July 10
Beans, pole	May 15-June 15	June 15-July 1	May 5-June 25	June 25-July 1
Beans, snap ²	May 15-June 15	June 15-July 15	May 5-June 25	June 25-July 25
Beets	April 1-May 10	Aug 1-Sept 1	March 20-May 1	Aug 1-Sept 1
Broccoli ³	April 10-May 20	July 20-Aug 20	April 1-May 10	July 20-Aug 20
Brussels sprouts ³	not recommended	July 10-Aug 1	not recommended	July 20-Aug 1
Cabbage ³	April 10-May 20	July 20-Aug 20	April 1-May 10	July 20-Aug 20
Cabbage, Chinese ³	April 10-May 20	July 20-Aug 20	April 1-May 10	July 20-Aug 20
Carrots	April 1-May 10	July 10-Aug 1	March 20-May 1	July 10-Aug 1
Cauliflower ³	April 10-May 1	July 10-Aug 10	April 1-April 20	July 10-Aug 10
Chard, Swiss	April 1-May 20	Aug 1-Sept 1	March 20-May 10	July 10-Sept 1
Collards, kale	March 20-May 10	July 20-Sept 1	March 10-May 1	July 10-Sept 1
Corn, sweet	May 5-July 10	not recommended	April 20-July 10	not recommended
Cucumbers	May 10-June 10	June 10-July 10	May 1-June 10	June 10-July 10
Eggplant ³	May 15-June 10	not recommended	May 1-July 10	not recommended
Garlic	not recommended	Sept 1-Oct 1	not recommended	Sept 1-Oct 1
Kohlrabi	April 1-May 10	Aug 1-Sept 1	March 20-May 1	July 20-Sept 1
Leeks ³	April 10-May 10	July 20-Aug 20	April 1-May 1	July 10-Aug 20
Lettuce, baby salad ²	April 10-June 1	Aug 10-Sept 20	April 1-May 20	Aug 10-Sept 20
Lettuce, head ^{2,3}	April 10-June 1	Aug 1-Sept 10	April 1-May 20	July 20-Sept 10
Muskmelon	May 10-July 1	not recommended	May 1-July 1	not recommended
Mustard ²	March 20-May 10	Aug 1-Sept 20	March 10-May 1	Aug 1-Sept 20
Okra	May 20-July 10	not recommended	May 10-July 10	not recommended
Onion (bulbing) ⁴	March 20-May 10	not recommended	March 10-May 10	not recommended
Peas, garden	March 20-April 10	not recommended	March 10-April 10	not recommended
Peas, southern	June 1-July 10	not recommended	May 20-July 20	not recommended
Peppers ³	May 10-July 10	not recommended	May 10-July 10	not recommended
Potatoes	April 1-June 1	not recommended	March 20-June 1	not recommended
Pumpkin	May 20-July 1	not recommended	May 10-July 1	not recommended
Radish ²	March 20-May 10	Aug 10-Sept 20	March 10-May 20	Aug 10-Oct 1
Rutabaga	not recommended	July 20-Aug 10	not recommended	July 20-Aug 10
Spinach ²	March 20-May 1	Aug 20-Oct 1	March 10-April 20	Aug 20-Oct 1
Squash, summer	May 10-June 20	June 20-Aug 10	May 5-June 10	June 10-Aug 10
Squash, winter	May 10-July 1	not recommended	May 5-July 1	not recommended
Sweet potatoes	May 20-July 1	not recommended	May 15-July 1	not recommended
Tomatoes ³	May 10-June 10	June 10-July 10	May 10-June 10	June 10-July 10
Turnips ²	April 1-May 10	Aug 1-Sept 1	March 20-May 1	Aug 1-Sept 10
Watermelon	May 20-July 1	not recommended	May 15-July 1	not recommended

¹ Do not harvest asparagus in first year. ² Plant multiple successions to extend cropping season. ³ Planting dates for transplants.

⁴ Planting dates for onion sets. Start seeds in greenhouse or high tunnel in late fall.

Hardiness Zone 7a and 7b

Actual last and first killing frost dates will vary due to local conditions and yearly temperature fluctuations. 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.

Table 3. Recommended planting date ranges by crop for hardiness zones 7a and 7b.

Crop	Zone 7a Spring	Zone 7a Fall	Zone 7b Spring	Zone 7b Fall
Asparagus ¹	March 20-April 20	not recommended	March 10-April 10	not recommended
Beans, lima	May 1-June 20	June 20-July 20	April 20-June 20	June 20-Aug 1
Beans, pole	April 20-June 20	June 20-July 10	April 10-June 10	June 10-July 20
Beans, snap ²	April 20-June 10	June 10-Aug 1	April 10-June 10	June 10-Aug 10
Beets	March 10-May 1	Aug 10-Sept 10	March 1-April 20	Aug 10-Sept 20
Broccoli ³	March 20-May 1	Aug 1-Sept 1	March 10-April 20	Aug 10-Sept 10
Brussels sprouts ³	not recommended	Aug 1-Aug 10	not recommended	Aug 10-Aug 20
Cabbage ³	March 20-May 1	Aug 1-Sept 1	March 10-April 20	Aug 10-Sept 10
Cabbage, Chinese ³	March 20-May 1	Aug 1-Sept 1	March 10-April 20	Aug 10-Sept 10
Carrots	March 10-April 20	July 10-Aug 20	March 1-April 10	July 20-Sept 1
Cauliflower ³	March 10-April 10	Aug 1-Aug 20	March 10-April 1	Aug 10-Sept 1
Chard, Swiss	March 10-May 1	Aug 1-Sept 10	March 1-April 20	Aug 10-Sept 20
Collards, kale	March 1-April 20	Aug 1-Sept 10	Feb 20-April 10	Aug 10-Sept 20
Corn, sweet	April 10-July 20	not recommended	April 1-Aug 1	not recommended
Cucumbers	April 20-June 20	June 20-July 20	April 10-June 10	June 10-Aug 1
Eggplant ³	April 20-July 20	not recommended	April 10-Aug 1	not recommended
Garlic	not recommended	Oct 1-Oct 30	not recommended	Oct 1-Oct 30
Kohlrabi	March 10-April 20	Aug 10-Sept 10	March 1-April 10	Aug 20-Sept 20
Leeks ³	March 20-April 20	April 20-July 1	March 10-April 10	April 10-July 1
Lettuce, baby salad ²	March 20-May 10	Aug 20-Oct 1	March 10-May 1	Sept 1-Oct 20
Lettuce, head ^{2,3}	March 20-May 10	Aug 10-Sept 20	March 10-May 1	Aug 20-Oct 1
Muskmelon	April 20-July 1	not recommended	April 10-July 10	not recommended
Mustard ²	March 1-April 20	Aug 10-Oct 1	Feb 20-April 10	Aug 20-Oct 10
Okra	May 1-July 20	not recommended	April 20-Aug 1	not recommended
Onion (bulbing) ⁴	March 1-May 1	not recommended	Feb 20-April 20	not recommended
Peas, garden	March 1-April 1	not recommended	Feb 20-April 1	not recommended
Peas, southern	May 10-Aug 1	not recommended	May 1-Aug 10	not recommended
Peppers ³	April 20-July 20	not recommended	April 10-Aug 1	not recommended
Potatoes	March 10-May 20	not recommended	March 1-May 10	not recommended
Pumpkin	May 1-July 1	not recommended	April 20-July 10	not recommended
Radish ²	March 1-May 1	Aug 20-Oct 1	Feb 20-April 20	Sept 1-Oct 10
Rutabaga	not recommended	Aug 1-Aug 20	not recommended	Aug 10-Sept 1
Spinach ²	March 1-April 10	Sept 1-Oct 10	Feb 10-April 1	Sept 10-Oct 20
Squash, summer	April 20-June 20	June 20-Aug 20	April 10-June 20	June 20-Sept 1
Squash, winter	April 20-July 10	not recommended	April 10-July 20	not recommended
Sweet potatoes	May 1-July 10	not recommended	May 1-July 20	not recommended
Tomatoes ³	April 20-June 20	June 20-Aug 1	April 10-June 20	June 20-Aug 1
Turnips ³	March 10-May 1	Aug 10-Sept 20	March 1-April 10	Aug 20-Sept 20
Watermelon	May 1-July 10	not recommended	April 20-July 20	not recommended

¹ Do not harvest asparagus in first year. ² Plant multiple successions to extend cropping season. ³ Planting dates for transplants. ⁴ Planting dates for onion sets. Start seeds in greenhouse or high tunnel in late fall.

Hardiness Zone 8a and 8b

Actual last and first killing frost dates will vary due to local conditions and yearly temperature fluctuations. 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.

Table 4. Recommended planting date ranges by crop for hardiness zones 8a and 8b.

Crop	Zone 8a Spring	Zone 8a Fall	Zone b Spring	Zone 8b Fall
Asparagus ¹	Feb 15-April 1	not recommended	Feb 15-April 1	not recommended
Beans, lima	April 20-July 1	July 1-Aug 20	April 10-July 1	July 1-Sept 1
Beans, pole	April 10-July 1	July 1-July 20	April 1-July 1	July 1-Aug 1
Beans, snap ²	April 1-July 1	July 1-Aug 20	March 20-July 1	July 1-Sept 1
Beets	Feb 20-April 10	Sept 1-Oct 1	Feb 20-April 10	Sept 1-Oct 1
Broccoli ³	March 1-April 10	Aug 20-Sept 20	Feb 20-April 10	Aug 20-Sept 20
Brussels sprouts ³	not recommended	Aug 20-Sept 1	not recommended	Aug 10-Aug 20
Cabbage ³	March 1-April 10	Aug 20-Sept 10	Feb 20-April 10	Aug 20-Sept 10
Cabbage, Chinese ³	March 1-April 10	Aug 20-Sept 20	March 1-April 10	Aug 20-Sept 20
Carrots	Feb 20-April 1	Aug 1-Sept 10	Feb 10-April 1	Aug 1-Sept 10
Cauliflower ³	March 1-March 20	Aug 20-Sept 10	Feb 20-March 20	Aug 20-Sept 10
Chard, Swiss	Feb 20-April 10	Aug 20-Oct 1	Feb 20-April 10	Aug 20-Oct 1
Collards, kale	Feb 10-April 1	Aug 20-Oct 1	Feb 10-April 1	Aug 20-Oct 1
Corn, sweet	April 1-Aug 10	not recommended	March 20-Aug 10	not recommended
Cucumbers	April 10-July 1	July 1-Aug 10	April 1-July 1	July 1-Aug 10
Eggplant ^a	April 10-Aug 10	not recommended	April 1-Aug 10	not recommended
Garlic	not recommended	Oct 15-Nov 15	not recommended	Oct 15-Nov 15
Kohlrabi	Feb 20-April 1	Sept 1-Oct 1	Feb 20-April 1	Sept 1-Oct 1
Leeks ³	March 1-April 1	not recommended	Feb 20-April 1	not recommended
Lettuce, baby salad ²	March 10-May 1	Sept 1-Oct 20	Feb 20-May 1	Sept 1-Oct 20
Lettuce, head ^{2,3}	March 1-April 20	Sept 1-Oct 10	Feb 20-April 20	Sept 1-Oct 10
Muskmelon	April 10-July 20	not recommended	April 1-July 20	not recommended
Mustard ²	Feb 10-April 1	Sept 1-Oct 20	Feb 10-April 1	Sept 1-Oct 20
Okra	April 15-Aug 10	not recommended	April 10-Aug 10	not recommended
Onion (bulbing) ⁴	Feb 20-April 20	not recommended	Feb 10-April 10	not recommended
Peas, garden	Feb 20-April 1	not recommended	Feb 10-April 1	not recommended
Peas, southern	April 20-Aug 20	not recommended	April 20-Aug 20	not recommended
Peppers ³	April 10-Aug 10	not recommended	April 1-Aug 10	not recommended
Potatoes	Feb 20-April 10	not recommended	Feb 20-April 1	not recommended
Pumpkin	April 10-July 20	not recommended	April 10-July 20	not recommended
Radish ²	Feb 10-April 10	Sept 10-Oct 20	Feb 1-April 10	Sept 10-Oct 20
Rutabaga	not recommended	Aug 20-Sept 10	not recommended	Aug 20-Sept 10
Spinach ²	Feb 10-March 20	Sept 20-Nov 1	Feb 10-March 20	Sept 20-Nov 1
Squash, summer	April 10-July 1	July 1-Sept 10	April 1-July 1	July 1-Sept 10
Squash, winter	April 10-Aug 10	not recommended	April 1-Aug 10	not recommended
Sweet potato	April 20-July 20	not recommended	April 20-July 20	not recommended
Tomatoes ³	April 10-July 1	July 1-Aug 10	April 1-July 1	July 1-Aug 10
Turnips ²	Feb 20-April 1	Sept 1-Oct 1	Feb 10-April 1	Sept 1-Oct 1
Watermelon	April 10-Aug 1	not recommended	April 10-Aug 1	not recommended

¹ Do not harvest asparagus in first year. ² Plant multiple successions to extend cropping season. ³ Planting dates for transplants. ⁴ Planting dates for onion sets. Start seeds in greenhouse or high tunnel in late fall.

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 also 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.

Table 5 (on page 6) 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 table 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.

Table 5 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. How wide you space the rows depends on the dimensions of the garden beds and the size of the hand tools or power tools used 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.

Additional Resources

Virginia Cooperative Extension Publications

Additional resources to assist in planning, planting, and maintaining the home garden are available from Virginia Cooperative Extension. Publications on a wide variety of individual crops and garden pests can be found on the VCE publications website at www.pubs.ext.vt.edu.

Jadrnicek, Shawn, and Emmanuel Torres Quezada. 2022. *How to Develop a Planting Plan for Vegetables in Virginia: A Sample Spreadsheet*. VCE publication SPES-401NP. www.pubs.ext.vt.edu/SPES/spes-401/spes-401.html.

Niemiera, Alex X. 2025. *Planning the Vegetable Garden*. VCE publication 426-312 (SPES-678P). www.pubs.ext.vt.edu/426/426-312/426-312.html.

Reiter, Mark S. 2024/2025 *Mid-Atlantic Commercial Vegetable Production Recommendations*. VCE publication 456-420 (SPES-586P). www.pubs.ext.vt.edu/456/456-420/456-420.html.

Relf, Diane. 2020. *Vegetable Gardening in Containers*. VCE publication 426-336 (SPES-255P). www.pubs.ext.vt.edu/426/426-336/426-336.html.

Further Resources

Southeastern Vegetable Extension Workers Group. 2025. *Southeastern U.S. 2025 Vegetable Crop Handbook*. 26 ed. <https://content.ces.ncsu.edu/southeastern-us-vegetable-crop-handbook>.

USDA. 2023. “2023 USDA Plant Hardiness Zone Map.” <https://planthardiness.ars.usda.gov>.

Acknowledgements

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Table 5. Guidelines for planting crops, approximate yield, plants per person, and number of plantings by season.

Crop	Distance between plants in row	Distance between rows	Approx. amount of seed/ transplants for 10-ft row	Approx. yield per 10-ft row	Approx. no. of plants per person per planting	No. of plantings Spring/ Summer	No. of plantings Fall
Asparagus	12-18 in	36-48 in	10 crowns	3-4 lbs	5-10	1	0
Beans, bush	1-3 in	24-36 in	1 oz seed	3-5 lbs	10	4	0
Beans, lima	3-6 in	24-36 in	1 oz seed	4-6 lbs	4-8	1	0
Beans, pole	4-12 in	36-48 in	1 oz seed	6-10 lbs	3-5	2	0
Beets	2-3 in	12-18 in	1/8 oz seed	8-10 lbs	10-20	2	2
Broccoli	12-24 in	18-36 in	10 transplants	4-6 lbs	3-5	2	3
Brussels sprouts	18-24 in	30-36 in	7 transplants	3-5 lbs	2-5	0	1
Cabbage	12-18 in	18-36 in	10 transplants	10-25 lbs	4-8	1	2
Cabbage, Chinese	4-30 in	18-36 in	10 transplants	20-30 lbs	6-8	1	2
Carrots	Thin to 1.5-2 in	6-12 in	1/20 oz seed	7-10 lbs	10-30	1	2
Cauliflower	12-24 in	24-36 in	10 transplants	8-10 lbs	3-5	1	2
Chard, Swiss	6-12 in	18-30 in	1/5 oz seed	8-12 lbs	3-5	1	2
Collards, kale	12-24 in	18-36 in	10 transplants	4-8 lbs	3-7	1	2
Corn, sweet	6-12 in	24-36 in	1/2 oz seed	7-10 lbs	15-20	3-5	0
Cucumbers	12-18 in	48-72 in	10 transplants	8-10 lbs	2-4	2-3	0
Eggplant	18-24 in	30-42 in	7 transplants	10-12 lbs	1-3	1	0
Kohlrabi	4-6 in	12-36 in	30 transplants	4-8 lbs	3-6	1	2
Leeks	4-6 in	12-30 in	1/10 oz seed	5-10 lbs	10-12	1	1
Lettuce, head	6-10 in	10-18 in	20 transplants	2-4 lbs	5-10	3	3
Lettuce, baby salad	0.2-0.4 in	6-12 in	1/4 oz seed	2-4 lbs	10-15 ft of row	2	3
Muskmelon	24-36 in	60-90 in	5 transplants	15-25 lbs	2-3	2	0
Mustard	1-2 in thin-6 in	18-30 in	1/10 oz seed	3-6 lbs	5-10	1	2
Okra	12-18 in	36-48 in	15 transplants	5-10 lbs	3-5	2	0
Onions (bulbing)	2-4 in	12-18 in	60 transplants	7-10 lbs	20-30	1	0
Peas, garden	2-3 in	12-30 in	1/2 oz seed	2-6 lbs	20-30	2	0
Peas, southern (cowpeas)	3-4 in	24-36 in	1 oz seed	5-18 lbs	20-30	1	0
Peppers	12-24 in	30-36 in	10 transplants	5-18 lbs	3-5	2	0
Potatoes	10-18 in	24-42 in	1 lb	10-20 lbs	10	1	0
Pumpkin	2-4'	5-8'	1/20 oz seed	10-20 lbs	1	1	0
Radish	3/4-1 in	6-12 in	1/8 oz seed	3-5 lbs	2 ft of row	2	4
Rutabaga	3-6 in	12-30 in	1/8 oz seed	8-12 lbs	10-20	0	1
Spinach	0.5-1 in thin to 4 in	6-12 in	1/8 oz seed	4-6 lbs	15	2	2
Squash, summer	18-36 in	36-60 in	1/10 oz seed	20-80 lbs	1-2	3	0
Squash, winter	2-4 ft	3-10 ft	1/10 oz seed	10-80 lbs	1-2	1	0
Sweet potato	9-12 in	30-48 in	15 slips	8-12 lbs	5	1	0
Tomatoes	18-36 in	36-50 in	7 transplants	15-45 lbs	2-4	2	0
Turnips	2-3 in	12-24 in	1/8 oz seed	8-12 lbs	10-20	1	1
Watermelon	3-4 ft	5-10 ft	3 transplants	8-40 lbs	2	2	0