



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.

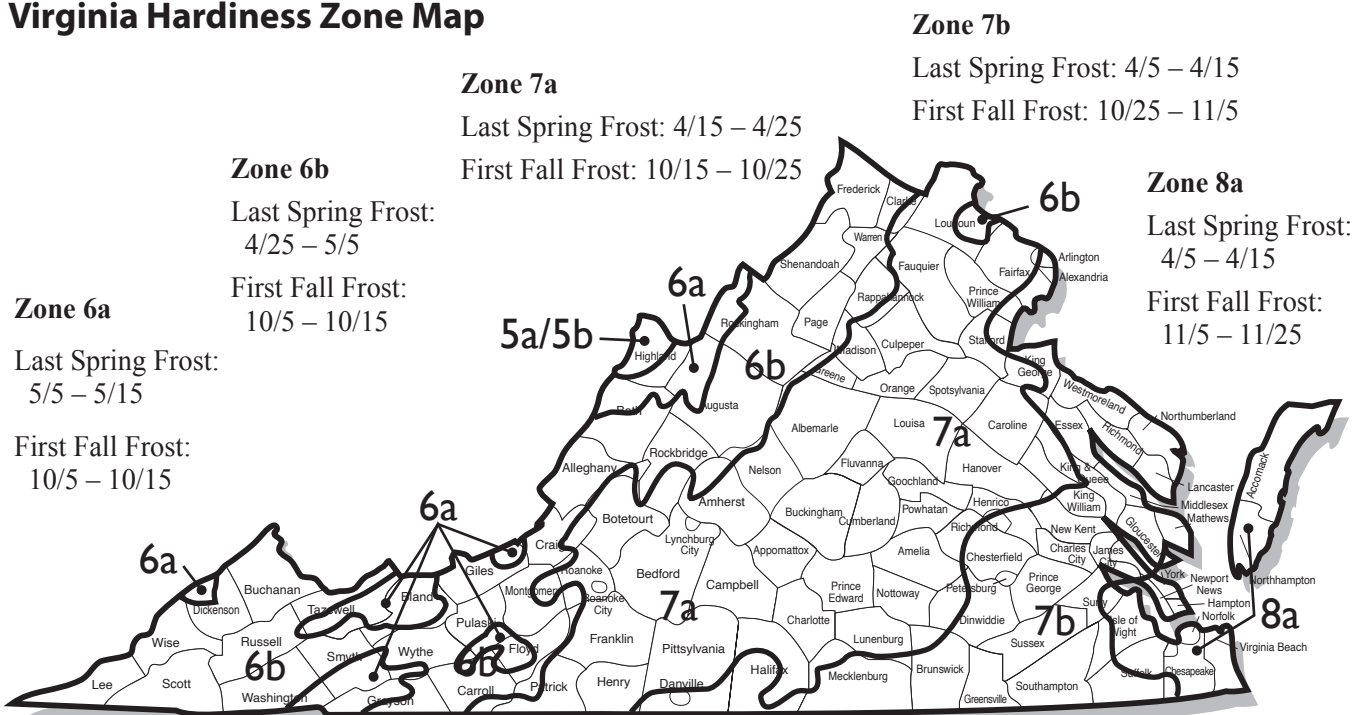
In addition, this guide suggests approximate amounts of each crop to plant based on family size and preferences, along with guidelines on plant spacing and the amount of seed or number of plants needed per 10 feet of row.

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



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