

Vegetables

Guide to Spring-Planted, Cool-Season Vegetables

*David W. Sams, Professor Emeritus
Plant Sciences*

Some of these vegetable varieties and planting dates are not the same as those grown by commercial growers. Commercial growers should be sure to consult the appropriate literature for commercial varieties and planting dates.

Garden vegetables can be divided into warm-season and cool-season vegetables. Cool-season vegetables require cool soil and air temperatures if they are to germinate, grow and mature with maximum yield and quality. They are shallow-rooted and thus are susceptible to drought. They are usually grown for their leaves or roots and respond well to nitrogen sidedressings.

Cool-season vegetables may be grown as a spring or a fall crop. Extension factsheet SP291-G, "**Fall Vegetable Gardens**," contains information on cool-season vegetables as a fall crop. The following table lists commonly grown cool-season vegetables and specific recommendations for their culture in the spring garden.

Plant cool-season vegetables near the early end of the recommended planting interval in West Tennessee. Plant later in Middle and East Tennessee. Gardens at high elevations will need to be planted near the very end of the recommended planting interval. Use the closer recommended row spacings only in compact gardens to be worked by hand. The recommended spacing between plants within rows should not be reduced.

Remember that estimated days to first harvest, length of the harvest season and yield all are subject to considerable variation. The exact figures will depend on the varieties grown, the cultural procedure utilized, the weather and many other factors. More detailed gardening information is available in the other factsheets in this series and in PB 902, "**Growing Vegetables in the Home Gardens**;" PB 1391, "**Organic Vegetable Gardening**;" and PB 1228, "**Gardening for Nutrition**." These may be obtained by Tennessee residents at no charge at local Extension offices.

The following tips will increase the chance of a highly productive spring garden.

Since cool-season vegetables need to be planted early, soil preparation can be a problem. One way to minimize this problem is to work up some ridges in the late fall for spring planting. Ridges dry out and warm faster than level soil and can be planted earlier.

Insects are a problem on several of the cool-season crops. Aphids and worms are especially bad. Watch for them and control them as they appear. Specific control recommendations are found in PB 595, "**You Can Control Garden Insects**."

Plant most cool-season vegetable seed at a depth equal to approximately three times the seed diameter. Plant lettuce seed very shallowly, as it needs light to germinate. Planted seed must be kept moist if it is to germinate well.



Vegetable	Variety	Planting Interval	Seed or Plants per 100 rows	Inches between rows	Inches between plants	Days to first harvest	Length of harvest season	Yields per 100 foot row
Beets	Detroit Dark Red, Cylindra	Mar. 1 to Mar. 10	1/2 oz. seed	14 to 36	2 to 3	55 to 60	4 weeks	75 to 150 lbs.
Broccoli	Emperor, Green, Comet, Premium Crop, Arcadia Gourmet, Savoy King	Mar. 1 to Apr. 1	80 plants	24 to 36	15	60 to 70	4 weeks	50 to 100 lbs.
Cabbage	Round Green types, Red Rookie, Stonehead,	Feb. 20 to Apr. 1	80 plants	24 to 36	15	60 to 75	3 weeks	125 to 200 lbs.
Cauliflower	Snow Crown	Mar. 1 to Apr. 1	80 plants	24 to 36	15	55 to 65	2 weeks	50 to 100 lbs.
Carrots	Danvers, Nantes, Little Finger	Mar. 1 to Apr. 1	1/4 oz. seed	14 to 36	2 to 3	75 to 85	4 to 6 weeks	50 to 100 lbs.
Collards	Georgia, Vates, Blue Max	March	1/4 oz. seed	18 to 36	15	65 to 75	4 to 30 weeks	100 to 150 lbs.
Kale	Vates, Dwarf Blue, Curled	February	1/4 oz. seed	18 to 36	12 to 15	55 to 65	4 to 20 weeks	100 to 150 lbs.
Kohlrabi	Grand Duke	Feb. or March	1/4 oz. seed	14 to 36	6	40 to 50	4 weeks	50 to 75 lbs.
Lettuce, Head	Buttercrunch, Iceburg	Feb. or March	1/4 oz seed	14 to 36	12 to 15	65 to 80	2 to 3 weeks	50 to 100 lbs.
Lettuce, Leaf	Salad Bowl, Black Seeded Simpson, Red Sails, Oakleaf	Feb. to Apr.	1/2 oz. seed	14 to 36	6	40 to 50	4 to 6 weeks	50 to 75 lbs.
Mustard	Savannah, Tender green, Southern Giant Curled	February	1/4 oz. seed	14 to 36	5 to 10	35 to 45	3 to 6 weeks	75 to 100 lbs
Onions, Bunch	Evergreen bunching	Feb. or Mar.	400 to 600 sets	14 to 36	2 to 3	30 to 60	3 weeks	30 to 50 lbs.
Onions, Storage	Sweet Sandwich, Sweet Spanish, Granex types	Feb. or Mar.	200 to 400 sets	14 to 36	3 to 6	100 to 120	2 weeks	50 to 100 lbs.
Peas, English	Wanda, Little Marvel, Green Arrow	Feb. 1 to March 20	1/2 to 1 lb. seed	12 to 36	2 to 4	65 to 70	2 to 3 weeks	20 to 30 lbs.
Peas, Snap	Sugar Snap, Sugar Daddy, Sugar Mel	Feb. 1 to March 20	1/2 to 1 lb. seed	12 to 36	2 to 4	65 to 75	2 to 3 weeks	30 to 50 lbs.
Potatoes, Irish	Cobbler, Kennebec, Yukon Gold, Red Pontiac	March	14 lbs. seed	30 to 36	12	90 to 110	4 months stored	100 to 120 lbs.
Radish	White Icicle, Cherry Bell, Champion	Feb. 15 to April 15	1/2 oz. seed	14 to 36	1 to 2	25 to 30	3 weeks	50 bunches
Spinach	Longstanding Bloomsdale, Tye, Melody	February	1 oz. seed	14 to 36	3 to 4	40 to 50	3 weeks	10 to 30 lbs.
Swiss Chard	Fordhook Giant, Lucullus, Rhubarb	March	1/2 oz. seed	18 to 36	6 to 8	50 to 60	4 to 30 weeks	50 to 150 lbs.
Turnip, Greens	Seven Top, All Top	March	1/2 oz. seed	18 to 36	2 to 4	30 to 40	Several weeks	50 to 100 lbs.
Turnip, Roots	Purple Top, White Globe, Tokyo Hybrid, Just Right, White Lady	March	1/4 oz. seed	18 to 36	3	40 to 65	6 months	100 to 150 lbs.

Making multiple plantings of many of the more rapidly maturing cool-season vegetables will considerably extend the harvest season.

Be sure to harden transplants of cool-season vegetables before they are planted in the garden. Lower the temperature at which they are growing about 10 degrees for 10 days or two weeks prior to transplanting.

Support "Sugar Snap" peas on a tall trellis, as they frequently grow 6 feet tall.

Blanch cauliflower by tying the leaves over the barely visible heads, to keep them white, tender and mild-flavored.

Cut potato seed pieces several days before planting them and fewer will rot.

Harvest mature onions before it rains on them and dry them thoroughly to reduce rotting in storage. Store them as close to 40 degrees as possible.

Arcadia broccoli is resistant to soft rot. It is slow to head and requires high fertility to develop good quality heads.

The following Tennessee Extension publications also contain information useful to home gardeners.

PB 595 You Can Control Garden Insects
PB 819 Vegetable Transplant Production
PB 901 Growing Vegetables in Home Gardens
PB 902 Growing Small Fruits in Home Gardens
PB 1155 Honey Bees & Pesticides
PB 1215 Disease Control in the Home Vegetable Garden
PB 1228 Gardening for Nutrition
PB 1391 Organic Vegetable Gardening
SP 291-A Growing Vegetable Transplants for Home Gardens
SP 291-B Growing Vegetables from Seed
SP 291-C Soil Preparation for Vegetable Gardens
SP 291-D Care of the Vegetable Garden
SP 291-E Growing Sweetcorn in Home Gardens
SP 291-G Fall Vegetable Gardens
SP 291-I Weed Control in Home Gardens
SP 291-K Tomatoes for the Home Garden
SP 291-L Fresh Vegetable Storage for the Homeowner
SP 291-M Planning the Vegetable Garden
SP 291-N Raised Bed Gardening
SP 291-P Guide to Warm-Season Garden Vegetables