

Cooperative Extension Service

University of Illinois at Urbana-Champaign, College of Agriculture

Vegetable Planting Guide

James C. Schmidt
Department of Horticulture

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Horticulture Facts

Even though seed packets often provide valuable information, the charts on the following pages will give you additional details about planting vegetable seeds and plants. Descriptions of the chart headings are as follows:

SEEDS OR PLANTS PER 100-FT. ROW is the recommended amount (or number) to use for proper spacing and good growth.

AVERAGE AMOUNT SUGGESTED PER PERSON is based on fresh use and is just a guideline. If you plan to preserve during the season, you will need to plant more of that particular vegetable.

ESTIMATED YIELD is based on optimum growth. To ensure good yields, maintain fertility, provide adequate moisture, use mulches, control pests (weeds, insects and diseases), start with healthy plants and fresh seed, and use recommended varieties. Weather conditions can also greatly affect yields.

DISTANCES BETWEEN PLANTS AND BETWEEN ROWS are the recommended spacings that allow for optimum growth and development. Plants growing too closely together compete for fertilizer and moisture, which creates conditions ideal for disease problems. If seed is sown thickly, thin the seedling at the recommended distance once they are well above the ground.

PLANTING DEPTH. A good rule of thumb is to plant the seed at a depth equivalent of 2 to 4 times their diameter. Cover small seeds with 1/4 to 1/2 inch of soil; place large seeds 1 to 2 inches deep.

FROST RESISTANCE. Vegetables are planted according to their ability to withstand frost and are classified into 4 general categories: *Very hardy*, *Frost-tolerant*, *Tender*, and *Warm-loving*. The average date of the last 32°F freeze

in the spring in your area can help you determine planting time.

Very hardy (VH) vegetables can withstand freezing temperatures and hard frosts without injury. They may be planted as soon as the ground can be prepared usually 4 to 6 weeks before the approximate frost-free date in your area. The suggested planting times are as follows:

Southern Illinois—March 10 to 25
Central Illinois—March 25 to April 10
Northern Illinois—April 10 to 25

Frost-tolerant (FT) vegetables withstand light frosts and can be planted 2 to 3 weeks before the approximate frost-free date. Suggested planting times are as follows:

Southern Illinois—March 25 to April 10
Central Illinois—April 10 to 25
Northern Illinois—April 25 to May 10

Tender (T) vegetables are injured or killed by frost, and their seeds do not germinate well in cold soil. They are usually planted on or after the approximate frost-free date. Suggested planting times are as follows:

Southern Illinois—April 10 to 25
Central Illinois—April 25 to May 10
Northern Illinois—May 10 to 25

Warm-loving (WL) vegetables cannot tolerate cold. They require warm soils for germination and good growth, and should be planted 1 to 2 weeks after the approximate frost-free date. Suggested planting times are as follows:

Southern Illinois—April 25 to May 10
Central Illinois—May 10 to June 1
Northern Illinois—May 25 to June 1

APPROXIMATE DAYS TO HARVEST will vary with temperature and weather conditions. Use this number as a general guide (along with *Horticulture Facts* VC-11-80) to decide when a crop is likely to be ready for harvesting.

VEGETABLE PLANTING CHART

Vegetable	Amount to Plant		Planting Instructions		Time Required			
	Seeds or plants per 100-ft. row	Average amount suggested per person	Estimated yield per 100-ft. row ^a	Distance between plants	Distance between rows	Planting depth	Frost resistance ^c	Approx. number of days (or years) to harvest ^d
Artichoke, Jerusalem	40-50 tubers	5-10 ft.	150-200 lb.	24-30 in.	36-48 in.	2-3 in.	FT	130-150
Asparagus	50 roots	10-15 roots	80-100 lb.	18-24 in.	36-60 in.	6-8 in.	VH	2 years
Bean, Bush (lima)	1/2 lb.	10-15 ft.	30 lb.	3 in.	18-24 in.	1-1 1/2 in.	WL	50-60
Bean, Bush (snap)	1/2 lb.	10-15 ft.	50 lb.	3 in.	18-24 in.	1-1 1/2 in.	T	50-60
Bean, Pole	1/2 lb.	5-10 ft.	50 lb.	3-4 in.	30-36 in.	1-1 1/2 in.	T	60-70
Beet	1 oz.	5-10 ft.	75 lb.	2-3 in.	12-18 in.	1/2-1 in.	T	55-65
Broccoli	50 plants	5-10 plants	80-100 lb.	18-24 in.	30-36 in.	b	FT	70-80
Brussels sprouts	50 plants	3-5 plants	80-100 lb.	18-24 in.	30-36 in.	b	FT	70-80
Cabbage	75-100 plants	3-5 plants	150-200 lb.	12-18 in.	18-30 in.	b	FT	70-80
Carrot	1/4 oz.	5-10 ft.	100-150 lb.	1-2 in.	12-18 in.	1/4 in.	FT	65-75
Cauliflower	50-75 plants	3-5 plants	80 lb.	18-24 in.	24-36 in.	b	FT	60-65
Celeriac	200 plants	5-10 ft.	100-150 lb.	6 in.	18-24 in.	b	FT	100-120
Celery	150-200 plants	4-6 plants	200 lb.	6-8 in.	24-36 in.	b	FT	100-110
Chard	2 oz.	5-10 ft.	100 lb.	4-6 in.	18-24 in.	1/2 in.	FT	50-60
Chinese cabbage	1/2 oz.	5-10 ft.	200-300 lb.	12-15 in.	24 in.	1/4 in.	FT	80-90
Collards	1/2 oz.	5-10 ft.	80-100 lb.	12-15 in.	18-24 in.	1/4 in.	VH	70-80
Corn, Sweet	4 oz.	15-25 ft.	100-150 lb.	9-12 in. (single) 36 in. (hills)	24-48 in.	1/2-1 in.	T	70-90
Cucumber	1 oz.	2-3 hills	100-150 lb.	12 in. (single) 36 in. (hills)	48-72 in.	1/2 in.	WL	60-70

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Eggplant	50-75 plants or 1/8 oz.	2-3 plants	100-200 lb.	18-24 in.	30-36 in.	b	WL	80-90
Endive	1/2 oz.	3-5 fl.	30-60 lb.	9-12 in.	18-24 in.	1/4 in.	VH	80-90
Kale	1/2 oz.	5-10 fl.	40-60 lb.	8-12 in.	18-24 in.	1/4 in.	VH	50-65
Kohlrabi	1/4 oz.	3-5 fl.	100 lb.	2-5 in.	18-24 in.	1/4 in.	VH	55-65
Lettuce, Leaf	1/4 oz.	5-10 fl.	25-30 lb.	4 in.	12-18 in.	1/4 in.	VH	35-50
Muskmelon	1/4 oz.	6-8 plants	200 lb.	8-10 in.	48-72 in.	1/2 in.	WL	80-90
Mustard	1/2 oz.	5-10 fl.	30-60 lb.	2-4 in.	12-18 in.	1/4 in.	VH	40-45
Okra	2 oz.	3-5 fl.	50-100 lb.	12-24 in.	12-18 in.	1/2 in.	WL	50-60
Onion (plants)	300-400 plants	12-15 fl.	200 lb.	3-4 in.	15-18 in.	b	FT	110-120
Onion (sets)	3-4 lb.	10-12 fl.	100 lb.	1-2 in.	15-18 in.	2-3 in.	VH	40-50
Onion (seed)	1/4 oz.	12-15 fl.	150 lb.	2-3 in.	15-18 in.	1/2 in.	VH	90-100
Parsnip	1/2 oz.	10-15 fl.	100 lb.	2-4 in.	18-24 in.	1/2-3/4 in.	FT	110-130
Pea	1 lb.	10-15 fl.	25-30 lb.	1-2 in.	18-24 in.	1 in.	VH	60-80
Pepper	50-75 plants	2-3 plants	75-100 lb.	18-24 in.	18-24 in.	b	WL	70-80
Potato, Irish	10 lb.	100-150 fl.	100-200 lb.	10-12 in.	24-36 in.	4 in.	VH	100-120
Potato, Sweet	75-100 plants	10-20 plants	80-100 lb.	12-18 in.	36-48 in.	b	WL	130-150
Pumpkin	1 oz.	2-4 plants	100-150 lb.	48 in.	84-120 in.	1 1/2 in.	WL	100-110
Radish	1 oz.	5-10 fl.	50 lb.	1/2-1 in.	12-18 in.	1/2-3/4 in.	FT	20-25

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Rhubarb	25-30 plants	3-5 plants	150-200 lb.	36-48 in.	36-48 in.	2 in.	VH 2 years
Rutabaga	1/8 oz.	5-10 fl.	80-100 lb.	6 in.	18-24 in.	3/4-1 in.	VH 90-100
Salsify	1 oz.	5-10 fl.	100-120 lb.	3 in.	24 in.	1/4 in.	VH 140-150
Spinach	1 oz.	5-10 fl.	40-60 lb.	2-4 in.	12-18 in.	1/4 in.	VH 35-45
Squash, Summer	1 oz.	2-3 hills	150-200 lb.	24-36 in. (single) 48 in. (hills)	36-48 in.	1/2-1 in.	WL 50-60
Squash, Winter	1 oz.	3-5 hills	200 lb.	24-36 in. (single) 48 in. (hills)	84-120 in.	1/2-1 in.	WL 80-120
Tomato	50-75 (staked) 30-50 (caged or groundbed)	6-8 plants	200-300 lb.	18-24 in. (staked) 24-36 in. (caged or groundbed)	36-60 in.	b	T 70-90
Turnip	1/2 oz.	5-10 fl.	100-120 lb.	2-4 in.	12-18 in.	1/4 in.	VH 40-60
Watermelon	1 oz.	3-5 hills	200-300 lb.	24-36 in. (single) 72 in. (hills)	84-120 in.	1 1/2 in.	WL 70-90

^aYields listed are estimated; they will vary with soil type, fertility, culture, weather, and growing conditions.

^bNormally set in garden as transplants. Plant at same depth as they were in the container.

^cIndicates whether vegetable is very hardy (VH), frost-tolerant (FT), tender (T), or warm-loving (WL). See page 1.

^dAlso an estimate; days (or years) to harvest vary with variety, weather, and growing conditions.