

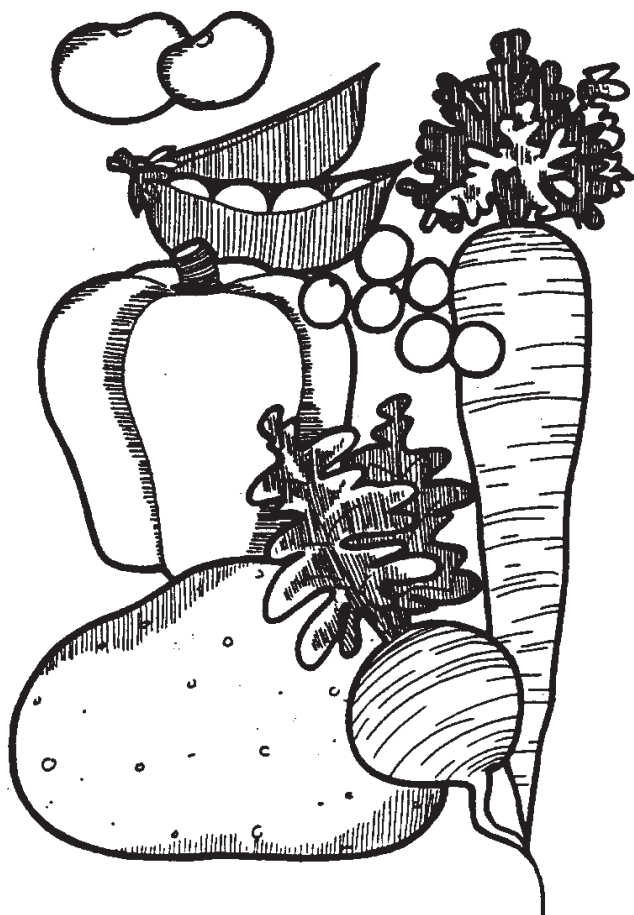
Vegetable Maturity Dates, Yields and Storage

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Each summer brings many questions about vegetable yields, weights and storage conditions.

This list is compiled to help vegetable growers determine approximate yields to expect, what their usual packing weights are, and if necessary, conditions required for storage.

Included are the approximate number of days from field planting to market under optimum growing conditions.



Approximate number of days from planting to market maturity under optimum growing conditions.

Crop	Early Variety	Common Type	Late Variety
Bean, bush	46	—	65
Bean, pole	56	—	72
Bean, lima, bush	65	—	78
Beet	50	—	80
Broccoli, sprouting ¹	70	—	150
Brussels sprouts ²	90	—	100
Cabbage ²	62	—	110
Carrot	60	—	85
Cauliflower, snowball type ²	55	—	65
Chinese cabbage	70	—	80
Chives	—	90	—
Corn	70	—	100
Cucumber	60	—	70
Eggplant	70	—	85
Kohlrabi	55	—	65
Lettuce, head	60	—	85
Lettuce, leaf	40	—	50
Melon, Honey Ball	—	105	—
Melon, Honey Dew	—	115	—
Muskmelon	75	83	90
Mustard	40	—	60
Okra	50	—	60
Onion	85	—	120
Parsley	70	—	85
Parsnip	100	—	130
Pea	58	—	77
Pepper, sweet ²	60	—	80
Potato	90	—	120
Pumpkin	110	—	120
Radish	22	—	40
Radish, winter type	50	—	60
Rutabaga	—	90	—
Spinach	40	—	50
Squash, winter	50	—	68
Squash, summer	80	—	120
Tomato ²	65	—	100
Turnip	40	—	75
Watermelon	65	75	95

When these crops are planted under low-temperature conditions, it take them longer than indicated below to reach the harvest stage.

¹ For a direct-seeded crop. Transplanting may delay maturity by a few weeks, depending on environmental conditions.

² For a transplanted crop additional time is needed from seed sowing to transplanting.

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Yields per acre of vegetable crops

The average yields for the whole country are lower than are desirable for profitable production. The indicated good yields can be exceeded readily in some areas where really favorable conditions exist. In fact in some states the average yield equals or exceeds what would be considered a good yield in other vegetable-growing areas.

Crop	Approximate Average Yield per Acre for United States		Good Yield per Acre
Asparagus	90 crates	(30 lb.)	200 crates
Bean, market	110 bushels		200 bushels
Bean, lima, market	80 bushels,		150 bushels
	in pods	(32 lb.)	
Bean, market	200 bushels	(52 lb.)	400 bushels or or 1,400 bunches
Broccoli	120 crates	(42 lb.)	200 crates
Brussel sprouts	4.5 tons		5 tons
Cabbage, market	8 tons		12 tons
Carrot, bunched	360 crates	(75 lb.)	450 crates
Cauliflower	420 crates	(37 lb.)	600 crates
Chard, Swiss	—		5 tons
Corn, market	105 crates	(5 dozen, 50 lb.)	300 crates (1,500 dozen)
Cucumbers, market	155 bushels	(48 lb.)	500 bushels
Eggplant	300 bushels	(33 lb.)	500 bushels
Garlic	4,800 lbs.		5,600 lb.
Lettuce	360 cartons	(2 dozen)	600 cartons
Melon, Honey Ball	120 crates	(70 lb.)	200 crates
Melon, Honey Dew	310 crates	(70 lb.)	400 crates
Muskmelon	110 crates	(70 lb.)	200 crates
Okra	—		5 tons
Onion	360 sacks	(50 lb.)	700 sacks
Pea, market	105 bushels,		150 bushels
	in pods	(30 lb.)	
Pepper, bell	245 bushels	(25 lb.)	500 bushels
Potato, early	200 bushels	(60 lb.)	400 bushels
Potato, late	250 bushels	(60 lb.)	400 bushels
Pumpkin	—		50 tons
Radish	—		20,000 bunches
Rhubarb	—		2 tons
Rutabaga	—		10 tons
Spinach, market	250 bunches	(25 lb.)	500 bushels
Squash, summer	—		400 bushels (45 lb.)
Squash, winter	—		10 tons
Tomato, market	150 bushels	(56 lb.)	300 bushels
Turnip	—		5 tons, bunched
Watermelon	280 fruits	(about 25 lb. each)	500 fruits

Temperature requirements

The temperature requirements for holding vegetables in storage or transit, the average freezing points, and the suggested relative humidities.¹

Vegetables	Recommended Temperature (°F)	Recommended Relative Humidity (%)	Maximum Amount of Time to be Held (Weeks)
Asparagus	32	90-95	1-2
Bean	45-50	85-90	1-2
Bean, lima, unshelled	32	90-95	2
Beet, topped ³	32	90-95	7-8
Broccoli	32	90-95	1-2
Brussels sprouts	32	90-95	4
Cabbage	32	90-95	12-16
Carrot, topped ³	32	90-95	16-20
Cauliflower	32	90-95	3-4
Chinese cabbage ⁴	32	90-95	8-12
Corn	32	90-95	½-1
Cucumber	50-55	90-95	2-4
Eggplant	50-55	85-90	1-2
Greens and Salads ⁵	32	90-95	
Kohlrabi	32	90-95	4-8
Lettuce, head	32	90-95	2-4
Melon – Casaba	50-55	85-90	4-8
Crenshaw and Persian	45-50	85-90	1-2
Honey Dew	50-55	85-90	2-4
Muskmelon	45-50	85-90	1-2
Okra	45-50	85-90	1-2
Onion, dry	32	70-75	28
Parsnip, topped ³	32	90-95	24-26
Pea	32	85-90	1-2
Pepper, sweet	45-50	85-90	1-2
Potato ⁶	38-40	85-90	24-26
Pumpkin	50-55	70-75	12-26
Radish, spring, bunched	32	90-95	1-2
Radish, winter	32	90-95	8-16
Rhubarb	32	90-95	1-2
Rutabaga, topped ³	32	90-95	8-16
Spinach	32	90-95	1-2
Squash, summer	45-50	85-95	½-1
Squash, winter ⁷	50-55	70-75	24-26
Tomato, mature green	55-60	85-90	1-2
Tomato, ripe	45-55	85-90	1-2
Turnip, topped ³	32	90-95	16-22
Watermelon	50-55	85-90	1-4

¹ Based on U.S.D.A. Handbook 66, 1954.

² The ranges in the relative humidity of the storage room are offered only as a guide. The effectiveness of these on the water loss from the products will depend on temperature, air movement, method of stacking, and the type of packaging, including liners, icing, and wrapping.

³ When root crops are marketed in bunches with tops attached, the holding temperatures should be the same as those indicated for the topped product, but the holding period can be only 10 to 14 days (or less).

⁴ Early cabbage can be held in good condition for ¾ to 1½ months.

⁵ Chard, collar, dandelion, green onions, leaf lettuce, mustard, parsley, turnip tops, and watercress. The storage life varies with the green but is at best only about a week.

⁶ Potatoes held for chipping should be at 50° to 60°F. Those stored below 50°F will need to be at higher temperatures before chipping.

⁷ Winter squash should be cured prior to storage, to provide a protection against disease organisms during storage. To cure, hold for 10 days with artificial heat at 80-85°F with a RH of 80%.

Sources:

Handbook for Vegetable Grower, Revised Printing by James Edward Knott, Professor of Vegetable Crops, University of California at Davis. Published by John Wiley and Sons, Somerset, NJ 08873.

Fruit and Vegetable Facts and Pointers. United Fresh Fruit and Vegetable Association, 101919th Street, N.W., Washington, D.C. 20036.

Recommended temperature, relative humidity and approximate storage life

Crop*	— Temperature —		Relative Humidity	Approximate Storage Life
	°C	°F		
			(percent)	
Fruits				
Apples	-1-4	30-40	90-95	1-12 months
Apricots	-0.5-0	31-32	90-95	1-3 weeks
Raspberries	-0.5-0	31-32	90-95	2-3 days
Strawberries	0	32	90-95	5-7 days
Cherries, sour	0	32	90-95	3-7 days
Veggies				
Asparagus	0-2	32-35	95-100	2-3 weeks
Beans, green or snap	4-7	40-45	95	7-10 days
Beets, bunched	0	32	98-100	10-14 days
Beets, topped	0	32	98-100	4-6 months
Broccoli	0	32	95-100	10-14 days
Brussels sprouts	0	32	95-100	3-5 weeks
Cabbage, early	0	32	98-100	3-6 weeks
Cabbage, late	0	32	98-100	5-6 months
Carrots, bunched	0	32	95-100	2 weeks
Carrots, mature	0	32	98-100	7-9 months
Cauliflower	0	32	95-98	3-4 weeks
Celery	0	32	98-100	2-3 months
Chard	0	32	95-100	10-14 days
Corn, sweet	0	32	95-98	5-8 days
Cucumbers	10-13	50-55	95	10-14 days
Eggplants	8-12	46-54	90-95	1 week
Garlic	0	32	65-70	6-7 months
Greens, leafy	0	32	95-100	10-14 days
Horseradish	-1.0-0	30-32	98-100	10-12 months
Kohlrabi	0	32	98-100	2-3 months
Leeks	0	32	95-100	2-3 months
Lettuce	0	32	98-100	2-3 weeks
Cantaloup (¾-slip)	2-5	36-41	95	15 days
Cantaloup (full-slip)	0-2	32-36	95	5-14 days
Honey Dew	7	45	90-95	3 weeks
Watermelons	10-15	50-60	90	2-3 weeks
Okra	7-10	45-50	90-95	7-10 days
Onion, green	0	32	95-100	3-4 weeks
Onion, dry	0	32	65-70	1-8 months
Parsley	0	32	95-100	2-2.5 months
Parsnips	0	32	98-100	4-6 months
Peas, green	0	32	95-98	1-2 weeks
Peppers, chili (dry)	0-10	32-50	60-70	6 months
Peppers, sweet	7-13	45-55	90-95	2-3 weeks
Potatoes, early crop	4-5	40-41	90-95	4-5 months
Potatoes, late crop	3-4	38-80	90-95	5-10 months
Pumpkins	10-13	50-55	50-70	2-3 months
Radishes, spring	0	32	95-100	3-4 weeks
Radishes, winter	0	32	95-100	2-4 months
Rutabagas	0	32	98-100	4-6 months
Spinach	0	32	95-100	10-14 days
Squashes, summer	5-10	41-50	95	1-2 weeks
Sweet potatoes	13-16	55-60	85-90	4-7 months
Tomatoes, mature-green	13-21	55-70	90-95	1-3 weeks
Tomatoes, firm-ripe	8-10	46-50	90-95	4-7 days
Turnips	0	32	95	4-5 months

* The wide range storage life is due to: degree of maturity at harvest, cultivar differences, and handling during/post harvest.

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