PennState Extension

Transplanting Guide

Last frost in Spring May 1										First frost in Fall October 1		
1	2	3	4	5	6	7	8	9	10	11	12	13
Plant	(C)old or (Warm) Season	Preferred pH range	Flat temperature – degrees F Germinating / Growing	Needs (L)ight or (D)ark	Date to start indoors	Early date to transplant	Latest date to transplant	Inches between plants	Inches between rows	Days to maturity	Date of maturity	Date of last productive harvest
Asparagus, Crowns	C	6.4-7.4	70/70	D	(3)	Apr 1	Apr 30	15	36	(6)	May 15	Jul 10
Asparagus, Plants	W	6.4-7.4	70/70	D	(3)	May 15	Jun 15	15	36	(6)	May 15	Jul 10
Broccoli	C	6.2-7.2	60/70	D	Feb 9	Apr 6	Jun 23	18	30	90	Jul 5	(4)
Brussel Sprouts	C	6.2-7.2	70/60	D	Feb 9	Apr 6	Jun 3	18	30	110	Jul 25	(4)
Cabbage, Chinese	C	6.2-7.2	65/65	D	Feb 19	Apr 16	Jul 13	12	24	70	Jun 25	(4)
Cabbage, Regular	C	6.2-7.2	65/65	D	Feb 9	Apr 6	Jul 8	18	30	75	Jun 20	(4)
Cantaloupe & Melons (1)	W	6.2-7.2	70/75	D	Apr 3	May 15	Jul 5	24	48	53	Jul 6	Aug 10
Cauliflower	C	6.2-7.2	60/70	D	Feb 9	Apr 6	Jul 8	18	30	75	Jun 20	(4)
Celery (1)	C	6.0-7.0	60/65	D	Feb 9	Apr 20	Jun 24	6	18	89	Jul 17	(5)
Cucumber (1)	W	6.0-7.0	70/75	D	Mar 30	May 11	Jul 3	24	48	55	Jul 5	Aug 9
Eggplant	W	5.5-6.5	75/80	D	Mar 12	May 21	May 29	18	36	90	Aug 19	Sep 23
Endive & Escarole (1)	C	6.0-7.0	60/70	D	Feb 4	Apr 1	Jul 23	12	21	60	May 31	Jun 28
Kale (1)	C	6.0-7.0	55/65	D	Feb 4	Apr 1	Aug 7	12	24	45	May 16	Jun 20
Lettuce, Head	C	6.2-7.2	60/70	L	Mar 13	Apr 24	Jul 23	12	24	60	Jun 23	(5)
Lettuce, Leaf	C	6.2-7.2	60/70	L	Mar 20	Apr 24	Aug 22	4	15	30	May 24	Jul 21
Pepper	W	6.0-7.0	75/75	L	Mar 20	May 15	Jun 13	15	30	75	Jul 29	Sep 23
Potato, White (2)	W	5.0-6.0	60/65	D	Mar 6	Apr 3	May 29	15	30	90	Jul 2	Jul 2
Potato, Sweet (2)	W	5.0-6.0	60/65	D	Mar 20	May 15	May 31	15	30	120	Sep 12	Sep 12
Pumpkin (1)	W	6.0-7.0	75/80	D	Apr 23	May 21	May 24	36	72	95	Aug 24	Sep 28
Squash, Summer (1)	W	6.2-7.2	75/80	D	Apr 17	May 15	Jul 16	24	48	42	Jun 26	Jul 31
Squash, Winter (1)	W	6.2-7.2	75/80	D	Apr 17	May 15	Jun 13	36	72	75	Jul 29	Aug 26
Swiss Chard (1)	C	6.0-7.0	60/70	D	Apr 3	May 1	Aug 18	9	21	34	Jun 4	Jul 2
Tomato	W	6.0-7.0	76/75	D	Mar 16	May 11	Jun 13	30	48	75	Jul 25	Sep 19

Understanding Transplanting Guide Data

Column 2 All vegetable plants prefer warm temperatures for growth and fruit development. This column indicates whether the seed can be planted before the last frost of the year or the plant will withstand a light frost in the Fall. If so, it is considered a cold (C) weather plant. Otherwise it is a warm (W) weather plant.

Column 3 Range of pH values in which plant varieties will survive. Optimum for each variety is the exact middle of these ranges.

Column 4 Temperatures indicated are in Fahrenheit degrees. The temperature on the left is the best for germinating that particular seed. The temperature on the right is best for growing the seedling after it has germinated.

Column 5 Most seeds prefer to germinate in the dark (D), by placing flats in a dark area or lightly covering the seeds with soil. A few prefer light (L) for germination. If planting a variety outdoors with an "L" in this column, the seeds should be covered with a little soil, or birds will enjoy your veggies before they even get started.

Column 6 Date to start seeds indoors for seedlings to be ready for transplanting by the date in Column 7. This date allows for a seven day period in a cold frame to harden the seedlings before setting them in the garden. If you intend to set your plants in the garden later than the date in Column 7, simply adjust columns 6, 12 and 13 by the same number of days.

Column 7 Earliest date to normally set transplants in the garden without suffering frost damage. If using season extenders (heavy row covers, walls-o-water, etc.) you can make this date and those in columns 6, 12 and 13 a little earlier.

Column 8 Our late dates are determined a little differently than other planting guides. Ours generally offer a late planting date based on the first frost in the Fall minus the days it takes a plant to mature. However, that only allows one picking. If you're like most gardeners, you'll want more than one picking from beans, peas and other plants that repeatedly bear fruit. Therefore, the "Latest Date" was calculated to allow a more complete harvest for your labors.

Column 9 Distance in inches to maintain between the seedlings when setting them in the garden. If your garden is in excellent condition you may want to adjust these distances. Distances are based on standard varieties in soil of average condition. If planting a smaller variety or your soil has a lot of humus and an excellent level of nutrients, you can decrease this distance by 1/6 for plants normally spaced more than 12 inches apart.

Column 10 Distance in inches to maintain between the garden rows. This allows approximately 12 inches between rows for walking. If handicapped and need assistance from walkers or similar equipment, than widen the rows accordingly. If you garden by an intensive bed method, disregard this column, as the distance in column 7 is then used for both plant and row spacing.

Column 11 Each variety of vegetable matures at its own rate. This column indicates the average time for a type of vegetable to mature. Compare it to the variety you want to plant. If the variety you have chosen takes more or less time to mature, adjust the dates in columns 9, 12 and 13 by the number of days difference. Remember, column 9 should be adjusted in the opposite direct than columns 12 and 13.

Column 12 The date an average maturing variety (column 11) should provide its first productive picking under good conditions if it was planted on the date indicated in column 8.

Column 13 The date an average maturing variety (column 11) should provide its last productive picking under good conditions if it was planted on the date indicated in column 8.

Notes Referenced in the Table

(1) Best results if seed is sown directly in the garden. Some varieties do not accept transplanting very well. Others cannot be transplanted without using special methods and precautions.

(2) Not started indoors from seed. Potato "seeds" are actually pieces of potato with two or more live eyes per piece. Some people start them indoors by laying potatoes out in a dark, cool (55-60 degrees F) location, and letting sprouts develop. The problem is that you must use untreated potatoes. Most potatoes from the supermarket have been treated so sprouts will not develop during storage. Sweet potatoes tend to be more trouble to start than the most avid gardener is willing to bother with.

(3) Not recommended to be started indoors.

(4) As with root crops, these vegetables are finished growing when removed from the garden. Instead of pulling the plants, cut the heads out by slicing through the stem just below the main head (inside their protective leaf pocket) with a diagonal cut. Cut in this way they will develop new, small heads, increasing the productivity of your garden.

(5) Normally not thought of as having a harvest "period" like beans, peas and tomatoes. Once pulled their harvest is over. Like any other plant they don't all mature at the same time. You can leave them in the ground and pull a few at any time when needed. Of course, the longer you leave them in the ground the more potential you have for pest problems.