



J&L Garden Center

The All Season Gift
and Garden Center

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www.JLGardenCenter.com

Planting Time for Annual Flowers and Vegetables



Many factors will influence how cold of temperatures a particular plant will tolerate. Some of these factors are: **1.** Type of Plant **2.** Age of Plant **3.** Whether the plant is just taken out of a warm greenhouse. **4.** If the plant has been *'hardened off'* for a few weeks. Before you risk planting flowers and vegetables too early in the spring, consider the following information.

'Hardening Off' means that you give tender plants a chance to get acclimated to the conditions they will be exposed to when you put them in your yard. To harden plants off you can:



1. Put them outside in a shady location during the day and bring them inside at night.
2. Let them dry out in between watering them.
3. Do not over-fertilize plants when they are young.
4. Allow at least two weeks of these procedures to completely harden off your new plants.

Micro-climates also make a big difference whether the plant can survive. One garden can be two to five degrees colder than another garden even within the same yard - these two degrees can be the difference between the plant freezing or surviving the cold. You may have noticed plants under a tree canopy do not freeze as readily as plants out in the open because of this temperature difference.

A few low temperature tolerances are:

Perennials low temp 25s	Alyssum low temp 32s
Ageratum low temp 40s	Aster low temp 40s
Begonias low temp 40s	Dahlia low temp 40s
Dusty Miller low temp 32s	Geranium low temp 35s
Impatien low temp 45s	Marigold low temp 40s
Petunias low temp 32s	Salvia low temp 40s
Snapdragon low temp 30s	Stock low temp 35s
Verbena low temp 35s	Vinca low temp 45s
Violas/pansies low temp 15s	Zinnia low temp 40s
Cold Veggies low temp 25s	covered at night 16s
inside a Wall of water 10s	
Hot Veggies low temp 39s	covered at night 30s
inside a Wall of water 25s	

Don't even attempt planting squash, pumpkins, melons or cucumbers outside too early. These plants hate the cold!

If the temperature is going to drop below these minimum temperatures you can sometimes help protect your plants by:

1. Bring them inside at night.
2. Cover them with frost blankets, bur-lap, or old sheets. The cover will retain any soil heat that may be present. (The air temp may drop to 25 but the soil may still remain at 52).



Avoid Plastic - Plastic will transfer the cold air temperature directly to your plants and will not retain soil heat.

3. Water plants before covering them. The water will help transfer soil heat to the plants better than dry soil can.

You may not be able to avoid frost damage if the temperature drops below 25 degrees no matter what you try!



The best rule of thumb: It is better to plant annual flowers and vegetables a week too late than a week too early!

Another rule of thumb that you should not follow: Plant Early and Plant Often!

J&L does not guarantee flower and vegetable plants from frost damage.

Seeds have similar frost requirements, but they are much more forgiving than trying to put plants outside too early. Corn and beans are two vegetables that many gardeners try to plant outside earlier than normal. Sometimes it works, but sometimes they freeze.



Vegetable Planting Chart For Spring

Plant Early - As soon as soil can be worked

Plant One Month Later as soil begins to warm

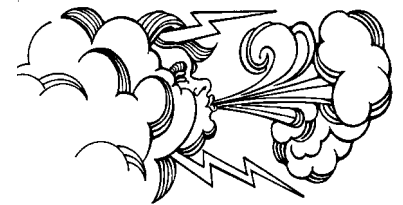
Plant at the Time of Last Average Frost

Plant Two Weeks after Last Average Frost Date

Broccoli, Brussel Sprouts, Cabbage, Cauliflower	Start Indoors	Transplant Outdoors	Transplant Outdoors	O.K. but Late
Eggplant, Pepper, Tomato	Start Indoors	Start Indoors	Wait - Harden them off	Transplant Outdoors
Beets, Carrots, Leek, Lettuce, Parsley, Onion, Parsnip, Swiss Chard, Kohlrabi	Good Time Plant Outside	Best Time Plant Outside	O.K.	O.K.
Pea, Radish, Spinach, Turnip	Good Time Plant Outside	Best Time Plant Outside	O.K.	Too Late - Wait until August to plant for fall
Sweet Corn	Wait	Wait - But take a chance	Good Time Outside	Best Time Outside
Bean	Wait	Wait - But take a chance	Good Time Outside	Good Time Outside
Cantaloupe, Cucumber, Pumpkin, Squash, Watermelon	Wait	Wait	Wait - But take a chance - or - Start Indoors	Direct Seed Outside or Transplant Outside

Wind Chill Index

Wind Speed (mph)	Actual Air Temperature													
	35	30	25	20	15	10	5	0	-5	-10	-15	-20	-25	-30
	Apparent Air Temperature													
5	33	27	21	16	12	7	0	-5	-10	-15	-21	-26	-31	-36
10	22	16	10	3	-3	-9	-15	-22	-27	-34	-40	-46	-52	-58
15	16	9	2	-5	-11	-18	-25	-31	-38	-45	-51	-58	-65	-72
20	12	4	-3	-10	-17	-24	-31	-39	-46	-53	-60	-67	-74	-81
25	8	-1	-7	-15	-22	-29	-36	-44	-51	-59				
30	6	-2	-10	-18	-25	-33	-41	-49	-56	-64				
35	4	-4	-12	-20	-27	-35	-43	-52	-58	-67				
40	3	-5	-13	-21	-29	-37	-45	-53	-60	-69				
45	2	-6	-14	-22	-30	-38	-46	-54	-62	-70				



Guide For Estimating Flower, Groundcover, & Shrub Quantities

Measure your area, Determine your spacing, and this chart will help you decide how many plants you need.

Spacing	10 square feet (5' x 2')	25 square feet (5' x 5')	50 square feet (5' x 10')	100 square feet (10' x 10')
6"	40 plants	100	200	400 flowers*
10"	15	37.5	75	150
12"	10	25	50	100 flowers*
18"	4.5	12	23	45
24"	2.5	6.5	12.5	25 flowers*
30"	1.5	4	8	16
36"	1	2.5	5.5	11
4'	1	1.5	3	6
5'	1	1	2	4

Example: 10' x 10' area = 100 square feet

Flowers planted 6" apart.

Flowers planted 12" apart

Flowers planted 24" apart

20 rows of 20 flowers = 400 flowers*

10 rows of 10 flowers = 100 flowers*

5 rows of 5 flowers = 25 flowers*

The hardest part of planting flowers is deciding what type, which color, and How Many Flowers to plant in your garden.

Don't Forget the Bumper Crop and the Root Starter