

VEGETABLE PLANTING AND SOIL TEMPERATURE

See <https://harvesttotable.com/vegetable-planting-and-soil-temperature/>

Soil temperatures are a great guideline for when to plant. There are optimum soil temperatures to plant for maximum seed germination, a moderate temperature to get 70% germination, and a minimum soil temperature to get some germination. Optimum for most vegetables is 65° - 75°F. Using a soil temperature probe, measure in the early morning between 1 and 3 inches deep for sowing seeds and 4 to 6 inches for transplanting seedlings. Leave the probe in the soil for 2-3 minutes. Measure temperatures for at least 3 days to get an average. (Cost: about \$12-15)

Minimum Soil Temperatures for Seed Sowing and Germination:

35°F: lettuce, onion, parsnip, spinach.

40°F: beet, broccoli, Brussels sprouts, cabbage, carrot, cauliflower, collards, Asian greens, Chinese cabbage, fava beans, kale, kohlrabi, mustard, arugula, radish, Swiss chard, turnip, pea, radish, rutabaga.

50°F: asparagus, celery, celeriac, corn, tomato.

60°F: bean, cucumber, eggplant, muskmelon, pepper, pumpkin, squash, watermelon.

Soil Temperature Needed for 70% Germination:

45°F: beets, lettuce, parsley, spinach.

50°F: broccoli, Brussels sprouts, cabbage, carrot, cauliflower, collards, Asian greens, Chinese cabbage, fava beans, kale, kohlrabi, mustard, arugula, radish, Swiss chard, turnip, pea, radish, rutabaga.

55°F: cabbage, corn, Swiss chard, tomatoes.

65°F: cucumbers, peppers.

70°F: beans, cantaloupe, melons, squash.

75°F: eggplant, okra, pumpkins.

Optimal Soil Temperature for near 100% germination:

65°F: parsnip.

70°F: spinach.

75°F: asparagus, lettuce, onion, parsley.

80°F: bean, carrot.

85°F: beet, cabbage, eggplant, pepper, radish, Swiss chard, tomato, turnip.

90°F: muskmelon.

95°F: corn, cucumber, pumpkin, squash, watermelon.

Vegetable Companion Planting Chart

Plant	Good Companions	Bad Companions
Basil	Pepper, Tomato, Marigold	
Bush Beans	Beets, Cabbage, Carrots, Cauliflower, Celery, Chard, Corn, Cucumbers, Eggplant, Leek, Lettuce, Parsnip, Pea, Potato, Radish, Rosemary, Strawberry, Savory, Sunflower, Tansy, Marigold	Basil, Fennel, Kohlrabi, Onion
Pole Beans	Carrots, Cauliflower, Chard, Corn Cucumber, Eggplant, Lettuce, Marigold, Pea, Potato, Radish, Rosemary, Savory, Strawberry, Tansy	Basil, Beets, Cabbage, Fennel, Kohlrabi, Onion, Radish, Sunflower
Beets	Bush Beans, Cabbage family, Lettuce, Lima Bean, Onion, Radish, Sage	Mustard, Pole Bean
Cabbage Family (incl. broccoli)	Bush Beans, Beets, Carrot, Celery, Cucumber, Dill, Lettuce, Mint, Nasturtium, Onions, Rosemary, Sage, Spinach, Thyme, All Strong Herbs, Marigold, Nasturtium	Pole Bean, Strawberry, Tomato
Carrots	Beans, Brussels sprouts, Cabbage, Chives, Lettuce, Leek, Onion, Peas, Radish, Rosemary, Sage, Tomato	Celery, Dill, Parsnip
Celery	Almost everything except → → → →	Carrot, Parsley, Parsnip
Corn	All Beans, Beets, Cabbage, Cantaloupe, Cucumber, Melons, Parsley, Peas, Early Potatoes, Pumpkin, Squash	Tomato
Cucumbers	Bush Beans, Pole Beans, Cabbage family, Corn, Dill, Eggplant, Lettuce, Marigold, Nasturtium, Onions, Peas, Radish, Tomato, Savory, Sunflower, No Strong Herbs	Potato
Eggplant	Bush Beans, Pole Beans, Peas, Peppers, Potato, Spinach	Fennel
Lettuce	Everything, but especially Carrots, Garlic, Onion and Radish	— none —
Melon	Corn, Nasturtium, Radish	Potato
Onion	Beets, Cabbage family, Carrots, Celery, Cucumber, Lettuce, Parsnip, Pepper, Spinach, Squash, Strawberries, Tomato, Turnip, Savory	Asparagus, Beans, Peas, Sage
Parsley	Tomato	— none —
Peas	Bush Beans, Pole Beans, Carrots, Celery, Chicory, Corn Cucumber, Eggplant, Parsley, Early Potato, Radish, Spinach, Strawberry, Sweet pepper, Turnips	Onion, Late Potato
Potato	Bush bean, Cabbage family, Carrot, Corn, Horseradish, Marigold, Onion, Parsnip, Peas	Cucumber, Kohlrabi, Parsnip, Pumpkin, Rutabaga, Squash family, Sunflower, Turnip, Fennel.
Radish	Beet, Bush Beans, Pole Beans, Carrots, Cucumber, Lettuce, Melons, Nasturtium, Parsnip, Peas, Spinach, Squash family	Hyssop
Spinach	Celery, Celery, Corn, Eggplant, Cauliflower	
Squash	Corn, Onion, Radish	
Strawberry	Bush Beans, Lettuce, Nasturtium, Onion, Radish, Spinach	Cabbage, Potato
Tomato	Asparagus, Basil, Bean, Cabbage family, Carrots, Celery, Chive, Cucumber, Garlic, Head lettuce, Marigold, Mint, Nasturtium, Onion, Parsley, Pepper, Marigold	Pole beans, Corn Dill, Fennel, Potato

From: <https://growincrazyacres.com/companion-planting-chart/>

Planning your garden in the Jemez, Jemez Public Library, 4 March 2023, Elaine Kennedy Sutherland, presenter

Gardening in the Jemez – Resources

Planting zones: <https://planthardiness.ars.usda.gov/pages/view-maps>

State and County Extension Resources

<https://pubs.nmsu.edu/>

<https://extension.nmsu.edu/areas/garden.html>

<https://desertblooms.nmsu.edu/>

<https://sandovalextension.nmsu.edu/>

<https://extension.colostate.edu/topic-areas/yard-garden/>

Facebook groups:

Northern NM Gardeners

Growing FOOD in and Around ALBUQUERQUE & Foraging Too

NMSU Extension Publications

Weeds & Pests

Weeds: <https://pubs.nmsu.edu/circulars/CR698/>

Pests: <https://pubs.nmsu.edu/circulars/CR607/>

Miscellaneous others:

<https://harvesttotable.com/vegetable-planting-and-soil-temperature/>

<https://growincrazyacres.com/companion-planting-chart/>

<https://sowtrueseeds.com/blogs/monthly-garden-schedule-by-zone>

from <https://www.gardeningknowhow.com/edible/vegetables/vgen/vegetable-cold-tolerance.htm>

