

# Preparing the Garden:

## Preparing a garden area:

- Compost, topsoil, manure, and fertilizer should be worked into the top 4 - 6 inches before planting, followed by a layer of mulch. This amends soil by improving aeration, nutrients and minerals available to plants, and drainage providing an improved soil for planting in. If you import garden soil, it should be blended with roughly 1/3 native soil.
- Conduct a soil test.
- Maintain slightly acidic soil (pH 6.5 - 6.8).
- Other elements may need to be added as identified in the soil test results. Use chemicals and fertilizers sparingly and only after careful analysis to ensure correct application.
- *To maintain ... each year add 3 - 4" compost, re-test, & amend as needed. If manure is added, do so at least 3 months before planting.*

## Vegetable Planting:

Vegetables that germinate in 35°F soil temperature include: lettuce, onion, parsnip, and spinach.

Vegetables that germinate in 40°F soil temperature include: fava bean, beet, broccoli, Brussel sprouts, Chinese cabbage, cabbage, carrot, cauliflower, kale, collard, kohlrabi, leek, parsley, radish, rutabaga, pea, Swiss chard, celery, and turnip.

- Carrot, pea, lettuce, kohlrabi, greens, beet, and radish grow easily from seeds can be sown directly into the soil.

**Hardy Vegetables** - asparagus, broccoli, brussels sprouts, cabbage, collards, onions, rutabaga (can be started indoors and transplanted) while kale, kohlrabi, leek, peas, radishes, spinach, turnips (can be direct sown).

**Semi-Hardy Vegetables** - artichoke, cauliflower, celery (can be started indoors and transplanted) while arugula, Asian greens, beets, carrots, endive, lettuce, potatoes, salsify, swiss chard (can be direct sown).

**Warm Weather Crops** - cantaloupe, cucumber, pumpkin, tomato, pepper, sweet potato, squash, sweet corn, lima beans, watermelon, eggplant, snap bean plant after the last frost day (many in our area suggest first week of June to be safe!).

- **Organic** - No artificial chemicals (fertilizers or insecticides) used for seed or plant production.

They must be raised and processed IAW USDA National Organic Program [ams.usda.gov](https://ams.usda.gov).

The label prohibits the use of synthetic fertilizers and pesticides, genetically engineered seeds and materials, sewage sludge (biosolids), and fresh manure.

Organic growers and processors, as well as the plants and seeds they produce, must also be certified by an inspection agency accredited by the USDA.

- **Heirloom** - refers to the plant's heritage. With seed-grown plants, only open-pollinated varieties are considered heirlooms.

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Unlike hybrids, open-pollinated seeds will reproduce “true to type,” meaning the offspring will display the same characteristics as the parent plant, and seeds can be saved from season to season.

Seeds are generally considered heirlooms if they were introduced into cultivation at least 40 years prior to the current date, though some experts consider seeds heirlooms only if they were introduced before World War II.

- **Hybrid** - plants that have been cross bred by traditional methods to have desirable qualities - seed will NOT be true to parent plant.
- **GMO** - genetically modified in a laboratory by crossing one species with another species for specific characteristics - usually insect resistance or tolerates chemical herbicide spray.

Seeds are only sold to large commercial farmers.

### Tilling:

- Tilling the garden performs a number of necessary functions. It mixes organic matter and fertilizer into garden soil and temporarily loosens the soil and helps control weeds that compete with crops for moisture and nutrients.
- Frequent tilling, however, may do more harm than good. Too much tilling tends to destroy the structural qualities of soil and eventually may leave you with soil that is better suited to making bricks than garden produce.
- **Till garden soil only when it will accomplish some useful purpose, such as turning under organic matter, controlling weeds, breaking crusted soil for water penetration, or loosening a small amount of soil for planting seeds.**

### Feeders:

- **Heavy feeders:** Beets, cabbage family crops (broccoli, Brussels sprout, cabbage, cauliflower, kale, kohlrabi, radish), celery, corn, cucumber, endive, lettuce, parsley, pumpkin, rhubarb, spinach, squashes, sunflower, tomatoes.
- **Light feeders:** Bulbs, chard, herbs, mustard, pepper, root crops (carrot, garlic, leeks, onion, parsnip, potato, rutabaga, shallot, turnip).
- **Soil builders:** alfalfa, beans, clover, peas.

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### References:

Tremendous amounts of information on Raised Beds, Amending Soil, Pest Management, Growing Seasons, and Gardening in general can be found on the internet. Regretfully, much of is of limited quality or value. To help refine your search, try adding the term site:edu to your search to focus on Extension publications and other research based information. A slightly broader range of material (yet still filtered of much of the undesired results) can be found by using the alternate “Google Scholar” site at [www.scholar.google.com](http://www.scholar.google.com).

### WSU Sites:

<http://gardening.wsu.edu>

<https://pubs.extension.wsu.edu/general-gardening>

<https://s3.wp.wsu.edu/uploads/sites/2073/2014/09/Home-Vegetable-Gardening-in-Washington.pdf>

<http://hortsense.cahnrs.wsu.edu/Search/MainMenuWithFactSheet.aspx?CategoryId=5&PlantDefId=56&ProblemId=281>

### OSU Sites:

<http://extension.oregonstate.edu>

<https://catalog.extension.oregonstate.edu/sites/catalog/files/project/pdf/em9027.pdf>

### Seed Companies:

[www.territorialseed.com](http://www.territorialseed.com) & <https://territorialseed.com/blogs/spring-growing-guides>

[www.Johnnyseeds.com](http://www.Johnnyseeds.com)

### National Organic Program:

[ams.usda.gov](http://ams.usda.gov)

### Soil Testing:

[simplysoiltesting.com](http://simplysoiltesting.com)