

Rooting for Success

To anchor the plant in place and to provide water, minerals and nutrients for growth, roots grow underground as a primary structure of a plant. Root crops are edible parts of plants which make up a crucial component of the world's food supply. These vegetables are compact, fibrous and can be held in storage without a significant loss of nutrients.

Root crops include familiar edibles such as carrots, onions, radishes, parsnips, beets and turnips, all of which are identified by an edible main root. However, crops such as potatoes, defined as tubers, are underground enlarged stem structures, and are primarily composed of starches.

Most root crops grow well in New Jersey. A soil pH of 6.0-7.0 is optimal since most nutrients for plant growth are available in this pH range. Test the soil to determine the pH of the planting site and to obtain information about fertilizer requirements. Grow crops in the ground, raised beds or containers that have six or more hours of sunlight. Loose, well-drained soil provides the optimal conditions for root development. Remove stones and other debris from the soil to encourage the growth of straight roots. Root crops perform best in a deep sandy loam which provides uniform moisture and air circulation.

Provide consistent moisture to promote good root development. Mulch plants for moisture retention and weed suppression. Side dress crops with compost, well-rotted manure or fertilizer in a 1-2-1 ratio to provide nutrients. An excess of nitrogen, the first number, can produce an excess of leaves to the detriment of root growth. Root crops are fairly pest and disease free.

Root crops are predominantly cool weather edibles. There are many varieties for each type of root crop available. Seeds germinate and grow best when sown directly in the garden in early spring and fall. Follow package directions for the depth of planting and germination time for each variety. Carrot seeds are very tiny and are often planted with radish seeds. Radishes germinate quickly and are a visual row marker for the slower grass-like carrot leaf emergence. Harvest radishes in one month, allowing the slower growing carrots additional room to grow. Beets develop in clusters; remove the edible leaves to thin the beet row and allow room for development. Onions are usually grown from sets. Sets are very small onions that need extra time to mature later in fall.

Plant root crops to extend the harvest season and enjoy fresh produce throughout most of the year.

Checklist for March

Flower and Vegetable Garden

- ✓ Begin your spring garden clean-up.
- ✓ Plant peas when the ground has thawed and is not soggy.
- ✓ Set out other cold-hardy vegetables such as spinach, chard, cabbage and cauliflower later in the month.

Trees and Shrubs

- ✓ Prune shrubs and evergreens including boxwood and Japanese holly before new growth begins.
- ✓ Remove diseased, dead, weak or crossing branches from summer flowering shrubs. Shape the plants. [Rutgers Fact Sheet FS1221](#) "Pruning Flowering Shrubs."
- ✓ Prune roses this month. Remove winter-killed canes. Pruning results in long-stemmed flowers and compact bushes.
- ✓ Unwrap fig trees toward the end of the month.

Lawn

- ✓ Fertilize your lawn after March 1st (NJ Fertilizer Law, A2290). Repair damaged areas of the lawn. [Rutgers Fact Sheet FS584](#) "Seeding your Lawn."