CENTER FOR AGRICULTURE

Carrots

Carrots (*Daucus carota*) are of the Parsley or Umbelliferae family, as are parsley, parsnip and celery.

Soil Preparation

Carrots need deep, loose soil to produce a long root. If the garden soil is hard, or if only the top three or four inches are worked, the short rooted varieties should be grown because long rooted varieties will be deformed or forked if grown in poorly prepared soil. Growing carrots in a clay-type soil is not recommended.

A pH between 6.0 and 6.5 is required for good carrot yields. Strongly acid soils should be limed according to soul test results. Have your soil tested by the UMass Soil and Tissue Testing Lab (<u>www.umass.edu/soiltest</u>) and follow the recommendations given. Lime (if needed) is more effective when mixed thoroughly in the soil in the fall.

The following steps are recommended for soil preparation:

- Apply two or three bushels of well rotted manure or compost per 100 square feet in the fall prior to planting in the spring. This is a good time to add lime if needed.
- Work them in thoroughly.
- Spread fertilizer evenly by hand or use a spreader prior to planting in spring.
- Rake or rototill into the soil.

NOTE: Using organic matter or manure that is not well composted as a fertilizer for carrots can cause the roots to become rough and branched.

Fertilizing

Apply 1.5 pounds of 10-10-10 fertilizer per 100 square feet. Rake or rototill into garden before planting. Side dress with the application when the carrot plants have reached about one-third of their growth.

Seeding

Sow carrot seeds no more than ½ inch deep in the early spring. If your garden soil is extremely heavy, cover the seeds with sand, vermiculite, sawdust or fine peat moss rather than soil. Plant two to four seeds per inch because only about half the seeds will germinate.

Carrots may be planted in a bed, a wide row, or in single rows on foot apart. Make successive planting about every three weeks to insure a continuous supply.

Watering

Carrots will not do well in a dry seedbed. The seedbed must be kept moist during the germination period, so it may need to be sprinkled lightly with water every day. The germination period is approximately two weeks. Some gardeners place a clear plastic sheet over the row after planting the seeds and giving them an initial watering; this warms the soil and conserves moisture. The sheet should be removed as soon as the seedlings emerge.

Weed Control

Shallow cultivation (one to two inches deep) when weeds are small is best. Pull weeds when they are small, since they compete with the carrots for water and mineral nutrition.

Pests

Carrots usually have few insect or disease pests in the garden. Locally, occasionally the carrot rust fly and wireworm or leaf blight may be a problem.

Other Problems

Problem: Poor stand

Cause: Planting too deep; not enough moisture during the germination period; or the soil is too hard

Problem: Fibrous roots

Cause: Fresh manure, dry periods followed by wet weather

Harvesting

The harvest of carrots can begin when they are pencil size to thin the plants in the row. The larger the space the remaining carrots have, the large they will grow.

After the carrots have been harvested, remove the tops and store in a cool, moist place. Do not wash until needed. For the largest yields, carrots should be left in the garden until a severe frost is expected.

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