# **Carrots**



# Daucus carrota var. sativus

A perfect vegetable for munching, salads and stews. They are high in beta carotene. Carrots must be directly planted from seed. They require loose, fine soil to attain long roots. Short rooted varieties are great for heavier soils and containers. Carrots for fall and winter harvest should be sown by mid July.

## **SITE REQUIREMENTS**

Carrots require full sun to part sun, ideally at least six hours of direct sun. A secret to success is in good soil preparation. Carrots grow best in loose, fine textured soil. Mix 3-4" of compost into the top 10-12" of the planting area using a garden fork. Avoid working the soil when it is too wet because it will result in clumpy soil which can stunt or deform carrot roots. Carrots prefer a pH of 5.5-7.0.

#### **PLANTING**

Carrots must be directly sown from seed. In the Portland area, they can be planted April 1<sup>st</sup> through July 15<sup>th</sup>. Scratch an all-purpose fertilizer into the bottom of each furrow. Plant seeds evenly ¼ - ½" deep in rows 12-16" apart. Cover seeds with a thin layer of vermiculite, sand or sifted compost. Cover beds with a floating row cover to prevent carrot fly maggot. Carrots are slow germinators (6-21days), so keep beds well weeded and moist, but not soggy. When seedlings are 1-2 weeks old, thin to 1-3" apart.

Plant carrots every 2-3 weeks for continual harvest.

## **WATER REQUIREMENTS**

How much water your plants will require depends on the soil and weather. Water new seed beds daily, or when the top ½ " of the soil is dry. Once seedlings reach 2" keep evenly moist soil. Avoid overhead irrigation, instead use drip or flood irrigation or hand watering. Mulch around carrots to retain soil moisture and discourage weeds. Too much water can result in cracked roots.

#### **FERTILIZING**

Carrots are light feeders and too much nitrogen may encourage an over abundance of top growth, or hairy misshapen roots. You can side dress with kelp or bone meal 3 weeks after germination.

#### HARVESTING & STORAGE

Water your carrots just before harvest to help loosen the soil. Carrots are ready when they have bright color. Most varieties are at their peak flavor when they are 1-1 ½" in diameter. Gently pull carrots by their green tops if the tops break off loosen soil with a garden fork before pulling.

#### **PESTS & DISEASES**

\*Damping-off occurs in cool, wet weather and prevents seedlings from emerging or causes seedlings to die off. Replant new seeds in an area with better drainage, or add more compost and wait for warmer weather. A soil crust or lack of moisture can also reduce germination. If this is the case mix more compost into the soil and replant new seeds.

\*Cutworms can often mow down all of your seedlings in one night. They can also eat holes into the leaves and stems. Spinosad is an organic control for cutworms. Nematodes can help control cutworms also.

\*Flea beetles chew dozens of tiny holes in the leaves. For prevention, cover new seed beds with floating row cover until plants are 8" tall. Dust with diatomaceous earth or spray with pyrethrin.

\*Snails and slugs will chew the leaves or eat new transplants when they feed at night. They often leave iridescent trails on leaves and the ground. Slug baits and beer traps are just two ways to control them.

\*Carrot rust fly maggots will chew tunnels in the surface of the roots. Cover new plantings with floating row cover to prevent the maggots. You can also apply beneficial nematodes to help control the maggot population. Do not store infected roots in the garden over the winter.

\*Caterpillars will chew the foliage. Carrots is a food source of the Swallowtail butterfly caterpillar. They have yellow and black stripes. You can choose to donate some of your carrots to the butterfly population, or gently move the caterpillars to a carrot weed such as Queen Anne's Lace.

\*Leaf blights are common and appear as spots on the leaves which eventually shrivel and die. It is best to wait 3 years before planting carrots in the same spot to reduce leaf blights. Fungicides such as Serenade and Copper can help control the blights from spreading.

\*Aster yellows appears as yellow new leaves above ground and deformed roots with tufts of hairs. Remove and destroy infected crop. This disease is spread by leaf hoppers and can be prevented using floating row cover over new plantings.

\*Cavity spot is a fungus which causes small horizontal lesions and eventually larger lesions with out secondary rot. Carrots are edible but should not be planted in infected area for at least 3 years.

\*Powdery mildew will cause white patches on the leaves. Control the spread of the fungus by removing infected foliage and spraying with copper or serenade.

## **VARIETIES**

There are many delicious carrot varieties suitable for the Portland area. Nantes types such as, Napa, Nelson and Scarlet nantes are blunt tipped, succulent and crisp because they absorb more water. Imperator varieties produce long tapered roots typically seen in stores, and require loose soil. Ball types and nantes are good for containers and shallow or heavy soil. Danvers and Chantenay are shorter thicker types that produce well in heavy soil. Merida, Napoli and Mokum are a few excellent overwintering varieties which should be plant by July 15<sup>th</sup> for fall and winter.

