



Carrots – *Daucus carota sativus*
Umbelliferae Family

Carrots are a cool season crop best grown in temperatures between 60-65F. If planted early they will produce a spring crop before temperatures get warm enough to reduce the flavor. In Las Cruces we can get two plantings a year, with roots from the late summer planting holding “in ground” well into winter.

Timing

Recommended planting time for spring Carrots is Jan 15 – March 1. For fall and winter growing, August is recommended for planting. Timing in spring is critical because carrots lose flavor when soil temperatures exceed 65-70°F - mulch carrots heavily in late spring to reduce soil temperatures. When planting in August, shading the soil surface will increase germination since carrot seed will not germinate at temperatures above 95°F. Shade and/or mulch will help keep the seed bed damp for the 2 weeks needed to germinate seed.

Growing Seasons for Carrots

Growing Seasons - Feb to Mid-April
Aug to Mid- Dec

Sow - Jan 15 - February
Sow - August

Temperature Requirements - Germination Temperatures 55 - 75°F
Optimum 60 - 65°F
Optimum Growing Temp - 65- 65°F



Planting and Growing

If planting in rows, sow seed on ¼” spacing. Thin to 2” apart when carrots are a two inches tall. If planting on a grid in wide beds, plant in rows within the wide bed. Space between bed rows should be at least 6-8 inches.

Sow seeds ¼ inch deep in loose soil that has been amended with well-aged compost. Do not add manure or high nitrogen organic fertilizers to the carrot bed - high nitrogen content cause excessive top growth and hairy roots. Adding calcium and some high phosphorous organic fertilizer (soft rock phosphate) to our soils is also advisable to insure an adequate available supply. For calcium, adding gypsum is the most cost effective option.

Carrot requires even watering with adequate soil water always available. Avoid drought stress and soggy soils. Water frequently (daily if needed) until germination is complete. The critical periods for water are during stand development and root growth. Drought stress during these times will cause roots to be course, cracked or have an off taste. During the root growth period be sure to water to a depth of at least 6 inches.

Improving Germination

Sowing radish seeds in the carrot row makes for good companion planting. Radish seed will germinate in 3-4 days marking the rows, breaking the soil crust and providing some shade as they leaf out. Harvest the radishes as space is needed for carrot thinning.

Mixing carrot seed with sand before sowing is one way to get more even seed spacing and reduce thinning later in the season. If you cover the seeds with a potting mix instead of soil, you will increase the germination rate by reducing crusting and increasing moisture content in the seedbed.

In spring, harvest carrots 65-75 days after planting (depending on variety) and before mid April. For summer/fall carrots, timing the harvest is not as critical, since soil and air temperatures are cooling down. In winter, carrots can be stored in the ground and harvested as needed.

Problems

Hairy Roots – excess nitrogen in the soil

Forked Roots – compacted or cloddy soils

Split Roots – uneven watering

Tough Roots and Low Sugar – high soil temperatures (above 70F)

Diseases – few here and generally not damaging

Insect Pests

Black Swallowtail Butterfly larvae will feed on the foliage

Root-knot nematodes are a serious problem for carrots

Wireworms (the larvae of Click Beetles) can damage roots, if abundant

Leafhoppers that transmit the carrot yellows disease can also be problematic

History

Their ancestry dates back thousands of years to Afghanistan where the wild ancestors are still found today. Original cultivation was probably for seeds and foliage for medicinal use. They were grown in ancient Rome and early Europe but not in the orange color form. Breeders in the Netherlands developed orange colored carrots during the 17th century.

You can still plant carrots in March, but it best to use short season varieties this spring and wait until August to plant the longer season and storage types.

Good Gardening and Good Eating

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