

The information offered here is to help gardeners grow vegetables successfully. It focuses on common questions asked as well as conditions, pests, and diseases that occur in St. Tammany Parish home gardens. Every attempt has been made to ensure the accuracy of the information, but references should always be checked, and LSU AgCenter personnel contacted if there are questions.

Carrots, Parsnips, & Salsify

By Jerry Ballanco



Introduction

If you have never eaten a freshly pulled and cleaned carrot, you are in for a treat. The crunch is expected, the sweetness is a delightful surprise. The varieties available allow for interesting and tasty variations to be tried. They grow easily in the same row, side by side, or separated to avoid surprises.

Carrots may be harvested "early" but gain sweetness with maturity. They stay well in the garden but, if left too long, they become a bit tough.

Growing carrots is not tricky, but demands soil that drains reasonably well and, importantly, has good depth and tilth. (Tilth, unscientifically means the workability of the soil...how easy it is to dig in).

The exception to the depth rule is carrots that are bred to be short and, thus, require less depth of soil. I have successfully grown "little fingers" in a handicap accessible bed that had 5 inches of potting soil in it. If you wish to grow small (short) carrots, look for those varieties in the seed catalogues.

Standard carrots, parsnips, and salsify all may grow a 6-10-inch-long root, so soil should be relatively loose to a depth of 10 inches or more.

Carrots also grow well in containers.

Soil preparation best includes pre-fertilizing with $\frac{1}{2}$ to $\frac{3}{4}$ pound of 8-24-24 or 13-13-13 per 25 square foot bed four weeks before planting. Side dress* with ammonium nitrate twice: first 3-4 weeks after germination and, again, 4 weeks after that. Carrots can be planted from mid-August through early March.

Carrot seeds do not age gracefully. Best practice encourages new seeds every year. The actual seeding of carrots is tricky. If a gardener is too casual in seeding carrots, the row will typically be a mix of intense overcrowding with long patches of no growth at all. The main reason many gardeners avoid growing carrots is past failures caused, in large part, by unpromising technique in seeding. Seeding difficulty is compounded by a relatively long lag period between seeding and germination. Heavy rains or inadequate moisture prior to germination both lead to poor crop stand. What follows is an unorthodox but uniformly successful method of seeding.

After preparing and fertilizing the soil, rake it relatively smooth. With finger or trowel, make a groove about $\frac{1}{4}$ inch deep. If space is available, make rows about 12 inches apart. Using a slow, laborious technique, try to tap seeds from the pack or seed dispenser, spacing them $\frac{1}{2}$ inch apart. (Seed tapes are available for ease of preparation, but varieties are limited.) Over-seeding in some spots is inevitable. After putting the seeds in the row, cover the trench with vermiculite which will hold the seeds in place and hold some moisture in the area for germination. For extra security, lay Agribond or other row cover material over the rows. Water the area thoroughly with mist or drip irrigation. Keep the soil moist.

When germination occurs (in 7-21 days) the seedling will be visible under the Agribond. The Agribond may be left in place or removed when a significant portion of the seeds have germinated. When the fern-like leaves are 3-4 inches tall, thin the seedlings to 1 inch apart by snipping the unwanted seedlings. Pulling the seedlings for thinning unnecessarily disturbs the roots of neighboring plants. (I have tried to pull and transplant carrots when thinning. A few made the transfer but not enough to make it worthwhile).

Typical maturity is 70-80 days. In a home garden, sequential sowing once every 6-8 weeks yields a consistent availability of fresh sweet carrots. To test for harvest readiness, feel the size of the shoulders in the ground. Usually, if the shoulder is the right size, the carrot will be sweet and ready. Testing shoulder size, pulling, tasting will guide you with new varieties as not all carrots have the same thickness at maturity.

In especially challenging weather, fungal infections or root rot are possible, but carrots are generally trouble free. If your carrots have discolored rings around the root when you pull them, or foliar changes occur, check the links below for more information. Cutworms may damage a stand of young carrots but other "above ground" pests are rarely problematic in St. Tammany Parish. Root knot nematode infection is the most frequent cause of trouble to home gardeners. Unfortunately, the damage is usually hidden until harvest. The infection of the roots cause misshapen carrots that have an "off" taste. The ugly galling that occurs in other roots is rarely seen in carrots. If a significant number of carrots show these changes, consider the soil infected and act accordingly. Resistant varieties of carrots are not yet available.



Distortions of Purple Haze carrot caused by root knot nematodes. Photo by Jerry Ballanco.

A nematode is a microscopic soil dweller that invades the roots and interfere with root nutrient functions. There are many kinds of nematodes: some very specific, even beneficial. The root knot nematode is a general nuisance and attacks the roots of many plants that home gardeners grow.

Discovery of this pest in your garden should alert your attention. Having some nematodes in the soil (especially sandy soil) is almost expected. The trick is to keep the population small enough that it does not reach the level of ruining your harvest. Do this by rotating nematode sensitive crops with crops that do not promote growth of the nematode population on a three- to four-year rotation schedule. Do this by selection of nematode resistant varieties, if available, or crops that nematodes do not infect.

If you discover evidence of nematodes in your garden there are two organic foils that are usually effective in reducing the nematode population. One is to plant French Marigolds; at the season's end, till them into the soil. (The nematode enters the marigold root but a chemical in the plant inhibits their further development.) The second involves digging the remains of a crab, crawfish, or shrimp boil into the garden. The chitin (found in the exoskeletons) interferes with development of the young nematodes. Commercial sources of chitin are also available.

<http://entoweb.okstate.edu/ddd/diseases/rktomato.htm>

Parsnips, though not very popular in the south, are very sweet when cooked. A parsnip is basically a carrot that needs to be cooked. It has a different and pleasant taste. Harvest when the shoulders are about 1 ½ inches in diameter.

Salsify** is grown even less often. When freshly pulled, it appears to be one of the most unappetizing vegetables you can imagine. However, when cooked in butter with the tender part of the leaves, salsify tastes like artichoke hearts. Salsify is skinny and often ragged looking and is grown for its main root that goes about 10 or 12 inches deep.

Parsnips and salsify take about 6 months from seeding to harvest. Wait until November/December to plant seeds as they need cool soil temperatures to germinate. Other characteristics and needs are like that of carrots. If the winter is extremely mild, neither parsnips nor salsify will be at their best.

*Side dressing is periodic fertilizer application. Spread fertilizer about 4" from stems and distribute as evenly as possible. Rake into the top two inches of soil and water in.

**Because of the need for cool temperature germination and six months to maturity, salsify and parsnips may not grow well in St Tammany Parish. You get bragging rights just for trying.

https://plantvillage.psu.edu/topics/carrot/infos/diseases_and_pests_description_uses_propagation

<https://ag.umass.edu/vegetable/fact-sheets/carrots-identifying-diseases>

About nematodes:

<http://entoweb.okstate.edu/ddd/diseases/rktomato.htm>

<https://www.lsuagcenter.com/profiles/coverstreet/articles/page1486135407127>

