How to Grow Parsnips in Your Garden

Parsnips are cool season vegetables that prefer sunny locations and fertile, deep, well-drained soils. Incorporate plenty of organic matter and an all-purpose fertilizer into the area before planting. Plant seeds ¼-½ inch deep. Thin seedling parsnips to 3 inches apart in row with rows 12-18 inches apart. Plant two to three weeks before the last frost. Parsnips taste best when plants have been exposed to several weeks of cool, frosty weather. Avoid water or fertilizer stress during growth. Irrigation should be frequent and uniform to ensure good growth. Control insect and diseases throughout the year. Harvest parsnips when the leaves reach full size.

Recommended Parsnip Varieties

There are many good parsnip varieties for sale in local gardening outlets and through seed catalogs. Most grow well in Utah.

How to Grow Parsnips

Soils

Parsnips prefer fertile, well-drained, deep, sandy soils rich in organic matter for best growth. Most light soils in Utah are well suited for parsnip production. Heavy soils need to be amended with plenty of compost and should be double dug to allow good root development.

Soil Preparation

Before planting, determine fertilizer needs with a soil test and then follow the recommendations given with the test report. If fertilizer applications are warranted, work the fertilizer into the top 6 inches of soil. If you fertilize with compost, apply no more than 1 inch of well-composted organic matter per 100 square feet of garden area.

Plants

Parsnips are always grown from seed. Always purchase fresh seed as parsnips lose germination and seedling vigor rapidly after one year. Parsnips can be planted after soils reach 40ºF. Seeds germinate best at 55-65ºF and require

14-21 days to emerge. Temperatures above 80⁰F reduce seed germination. Parsnips grow best when temperatures do not exceed 75⁰F. High summer temperatures reduce growth, decrease quality, and cause bitter or off-flavored roots. Temperatures down to 32⁰F do not seriously damage plants.

Planting and Spacing

Seeds should be planted ¼ inch deep. Crusting soils will limit seedling emergence and affect plant stands. Plant seeds on soil surface then cover seed with compost or fine sand to help with stand establishment. Maintain a uniform and moist soil surface to ensure good plant stands. Over-seed parsnips, then thin to 3-6 inches between plants after emergence. Plant rows 12-18 inches apart. Dense plantings will reduce weed pressure. Planting radishes with parsnips helps minimize the crusting problem and identifies where the planted rows are located. Parsnips can be left in the garden after light frosts and are often overwintered under heavy mulches. Wait until the fall when cool conditions improve flavors before harvesting.

Water

Water regularly, applying 1-2 inches per week depending on weather. Water requirements depend on soil type. Use drip irrigation if possible. Mulching around the plants helps to conserve soil moisture. Avoid overwatering as hairy roots form and forking may occur. Moisture fluctuations also cause root disorders, slow leaf development, and contribute to bitterness. Wet and dry periods favor root cracking.

Fertilization

Apply ¼ cup per 10 foot of row of a nitrogen-based fertilizer (21-0-0) six weeks after emergence and again four weeks later to encourage rapid plant growth. Place fertilizer to the side of the row and irrigate it into the soil. Revised April 2020

Mulches

Apply organic mulches during summer when temperatures increase. Mulches cool the soil and reduce water stress. Organic mulches such as grass clippings, leaves, straw, and newspapers also help control weeds. For over-wintering parsnips, mulch heavily with straw or compost, as with carrots.

Parsnip Pest Control

Insect	Identification	Control
Parsnip Fly	Small white maggots that feed on and burrow into the developing root.	Use soil applied chemicals at planting or cover young emerging seedlings with fabric row covers to exclude egg-laying adults.

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Disease	Symptom	Control
Leaf Blights	Fungal diseases that cause spotting on infected leaves.	Occur when foliage remains wet for long periods.
Root Rots and Spots	Fungal diseases that cause decay and rotting of the root. Leads to forking and off-shaped roots.	Crop rotation. Soil solarization.
Yellows	Yellow discoloration of plants.	Carried by leafhoppers. Cover plants with fabric mulch. No known control.

How to Harvest and Store Parsnips

Parsnips can be harvested when the roots reach full size. Generally roots are mature 100-120 days from seeding. Use digging fork to loosen soil and pull up needed plants by the tops and trim off leaves. Wash and store at 32ºF and 95% relative humidity for two to four weeks. Parsnips can be stored in the garden under heavy mulch or dug and stored in moist sand in a cool cellar for several months. Do not store parsnips with apples or pears as the fruit gases cause the parsnip roots to get bitter.

Parsnip Plant Productivity

Plant 10 feet of row per person for fresh use and 10 feet for storage. Expect 5-7 pounds of roots per 10 linear feet of row.

Parsnip Nutrition Facts

A cup serving is low in fat, moderately high in carbohydrates and fiber with an abundance of flavor and crunch.

Frequently Asked Questions

Why do parsnip seeds germinate so poorly?

Parsnip seeds germinate very slowly even under the best conditions and also lose their germination potential after the first year. Always buy and plant fresh seed.

Can parsnips be left in the soil over winter?

If you leave parsnips in the soil over winter, throw a few inches of soil over the crowns after the first fall frosts. Stored starches are changed to sugar in early spring as the old plants prepare for new growth, thus roots harvested in early spring are especially tender and sweet. The roots lose flavor and become "woody" if you do not harvest them before new leaves begin to grow.

Authors

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