Parsnips in the Garden

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Reviewed by Dan Drost, June 2010

Summary

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 2-3 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 Varieties

There are many good parsnip varieties for sale in local gardening outlets and through seed catalogs. Most grow well in Utah. Good varieties include Harris Model, All American, Andover, Lancer, and Cobham Marrow.

How to Grow

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, incorporate up to 2-4 inches of well composted organic matter and apply 2-4 cups of all-purpose fertilizer (16-16-8 or 10-10-10) per 100 square feet. Work this into the top 6 inches of soil.

Plants: Parsnips are always grown from seed. Always purchase fresh seed as parsnips lose viability 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 80ºF reduce seed germination. Parsnips grow best when temperatures do not exceed 75ºF. High summer temperatures reduce growth, decrease quality, and cause bitter or off-flavored roots. Temperatures down to 32ºF do not seriously damage plants.

Planting and Spacing: Seeds should be planted ¼-½ 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 4-6 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 over-watering 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) 6 weeks after emergence and again 4 weeks later to encourage rapid plant growth. Place the fertilizer to the side of the plants and irrigate it into the soil.

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.

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.
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.

Harvesting and Storage

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 2-4 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 gasses cause the parsnip roots to go bitter.

Productivity

Plant 10 feet of row per person for fresh use and 10 feet for storage. Expect 75 pounds of roots per 100 linear feet of row.

Nutrition

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

Frequently Asked Questions

Q. 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.

Q. 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.

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