



Planting Root Crops

Root Crops: Beets, Carrots, Parsnips, Radishes, Rutabagas, Turnips, etc.

At a Glance

Soil: should be rich, well-drained, high in organic matter

Water: consistent soil moisture is a must

Temperature: **hardy veggies** tolerate daytime temps as low as 40, and may survive minor frost (**radishes & turnips**)

Semi-hardy veggies need a minimum temperature of 40-50 degrees, and aren't as tolerant of frost (**beets, carrots, parsnips**)

Mulch: use organic mulch, such as dry grass clippings; cools the soil in summer, stabilizes moisture, controls weeds

- **Soils-** Root crops need a rich, well-drained soil, high in aged organic matter.

- **Mulch-** use an organic mulch (like dry grass clippings) to cool the soil in summer, stabilize soil moisture, and control weeds.

- **Irrigation-** Consistent soil moisture is a must.

- **Temperatures**

- Hardy vegetables grow with daytime temperatures as low as 40 degrees, and may survive a frosty nip. These include radishes and turnips.

- Semi-hardy vegetables grow with minimum temperatures of 40 to 50 degrees, but are less tolerant of a frosty night. These include beets, carrots, and parsnips.

- **Harvesting**

- Carrots- Loosen the soil around these before digging. Good when at least 1 inch at the crown. They hold quality for about three weeks after reaching recommended size.

- Parsnips and Rutabaga- After two frosts, which improve flavor, dig or mulch (3 to 4 inches deep) to harvest for a month longer.

- Radishes- Do not leave in the ground long after mature stage, their condition will deteriorate quickly. Do not leave in the ground long after mature stage, their condition will deteriorate quickly.

- Beets- Days to maturity tend to be between 50 and 70 for most varieties, although they can be harvested at any time you see fit. Don't let greens grow above 6 inches before harvesting. Don't forget about the tops! Fresh beets can be stored in the refrigerator for 5–7 days.

- **Carrot disorders**

- Strong flavor- Many varieties have a high oil content (and the oil can turn rancid); change varieties.

- Hairy or rough root surface develop from too much fresh organic matter in the soil. Use old, well-aged compost or manure in the root crop section.



- Stubby, knobby, or cracked roots arise from uneven moisture supply, hot soil temperatures, or poor, rocky, or compacted soil conditions.
- Failure of seedlings to emerge may arise from soil crusting, planting too deep or high soil temperatures.
- **Radishes**
 - Hot and/or pithy radishes arise from hot weather, hot soil, and/or plants that are past maturity.
 - Thin plants as soon as they pop through the ground!
- **Replanting of root crops for fall harvest**- for tender young root crops, replant in mid-summer (Front Range area) for a fall harvest.
- **Winter storage of roots**- Some varieties of carrots store well in the garden soil or in a root cellar for year-around use. Other carrot varieties become strong flavored as the oil becomes rancid. Two useful options for winter storage include:
 - Leave undisturbed where growing in the garden and mulch the bed with straw or other organic materials. Dig as needed.
 - Place harvested carrots in straw in a garbage can storage pit.

David Whiting, C. O. (2011, July). *Colorado Master Gardener Notes #719*. Retrieved from Colorado State University Extension: www.cmg.colostate.edu

Droll, C. (n.d.). Timing important in harvesting garden veggies. *The Denver Post*. Denver, Colorado, United States.