



Reviewed by Dan Drost, June 2010

## Horseradish in the Garden

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### Summary

Horseradish is a hardy perennial vegetable that is grown for its thick yellowish to white taproot. It is cultivated from crown or root cuttings planted in the early spring. Horseradish will grow about anywhere, but the roots are larger, tastier, and less branched when given proper care and cultivation.

### Recommended Varieties

Maliner Kren is a German variety that has the most vigorous growth and largest roots. New Bohemian is a variety that may lack the root quality and yield of other varieties, but is resistant to white rust and mosaic. *Variiegata* is a cultivar that is less invasive, has cream-variegated leaves, and tolerates partial shade. Very few garden centers stock horseradish roots so look for them on the internet or get a root cutting from a gardener or friend who grows the plants.

### How to Grow

**Soil:** Horseradish will grow in all soil types provided they are well drained, high in organic matter, and fertile. The recommended pH is 6.0 to 7.5.

**Soil Preparation:** Before planting, incorporate 4-6 inches of well-composted organic matter and 2 ounces of all purpose fertilizer (16-16-8) per square yard of planting area. Double dig this into the soil to provide a good rooting environment for the plants.

**Plants:** Horseradish grows best at cool temperatures (60-65°F). Horseradish also requires a fairly cold fall, when the root size and flavors develop. During the growing season, remove any of the bottom leaves that turn brown.

**Planting and Spacing:** Horseradish is propagated from crown or root cuttings. For areas with short growing seasons, use the crown method. Dig a

plant and split the root into four equal pieces containing some leaf and root tissue. Let the wounds heal for several days before planting at a 45-degree angle, with the crown positioned one to two inches below the soil surface.



Root cuttings are pencil sized pieces of root collected from larger roots. Cut the end close to the main root square and the other end on an angle. Plant the square end of the root higher than the angled end. Plant these root pieces 2-3 inches deep and one foot apart. To keep horseradish from spreading, some gardeners plant the roots in buried pots or in 12 inch wide and 24 inch long PVC plastic pipes. Plant in late March or early April, for the average garden, four to six plants are sufficient to meet the family's needs.

**Water:** Horseradish is quite drought tolerant, but the roots become woody and has a weak flavor if stressed too much. The roots become very soft and have a strong flavor if over watered. Water horseradish once a week (1-2 inches of water) so it penetrates to a depth of 18-24 inches.

**Fertilization:** In addition to the fertilizer and at planting, apply 1 teaspoon per plant of nitrogen (21-0-0) 4 and 8 weeks after planting. Too much nitrogen will cause excessive top growth and root branching.

**Handling:** To produce smooth, strong roots, some gardeners dig around the plant after growth starts to remove all additional leaf shoots except the one at the top. After the leaves reach 1 foot in height, they will also dig around the plant to uncover the upper part of the root and carefully remove all of the larger lateral (branch)

roots. These procedures help ensure that the main root grows vigorously.

**Mulches and Row Covers:** Mulching with compost or leaves during the year will help retain moisture and suppress weeds.

## Pest Control

**Weeds:** Hoeing between horseradish plants is recommended during the early growth when plants are small. When it matures, it is difficult for weeds to grow near horseradish.

**Insects and Diseases:** Few pests or diseases affect horseradish. Root rot is common if plants are over watered.

## Harvest and Storage

In regions with long growing seasons (150 days), horseradish can be harvested at the end of first year. Horseradish is harvested in the autumn and the root is stored until the next spring when plants are replanted. It is important to dig all the roots during harvest since small roots from the horseradish can become a weed in the garden. Harvest begins after several frosts which helps improve flavor. Dig up the plant, trim off the tops and side roots and scrub root clean. For immediate consumption, grate only as much

as you will use in a month and store in the refrigerator. Intact roots will retain their flavor for up to 3 months if stored properly. Horseradish roots should be stored in moist sand or sawdust in a dark root cellar, or they can be put in a plastic bag with moist sand and stored in the refrigerator. Save the side roots for planting the next spring.

## Productivity

Horseradish produces from 3 to 7 pounds per square yard of planted area. One root will make about a half-pint of horseradish sauce.

## Nutrition

Horseradish provides potassium, calcium, vitamin C, phosphorus, iron, and vitamin B. Horseradish also has antibiotic properties.

## Frequently Asked Questions

***Q. Can horseradish leaves and roots be fed to livestock?*** Do not feed animals horseradish, the volatile oils in the plant cause acute inflammation of the stomach and can be fatal.

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This publication is issued in furtherance of Cooperative Extension work. Acts of May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture, Noelle E. Cockett, Vice President for Extension and Agriculture, Utah State University. (HG/Garden/2006-07pr)