



Vegetables: Growing Radishes in Home Gardens



WASHINGTON STATE UNIVERSITY EXTENSION FACT SHEET • FS127E

Crop at a Glance

Growing season: Spring and fall.

Time of planting: Spring/summer types—mid-April in eastern Washington and mid-March in western Washington; winter types—August in eastern and western Washington.

Spacing: Spring/summer types—0.5 inches apart in furrows spaced every 2 inches; winter types—0.5 inches apart in furrows spaced every 18 inches.

Days to harvest: Usually 21–28 days for spring/summer types and 50–60 days for winter types.

Average yield: Varies by cultivar (possibly 2–3 lb/10-ft row for spring/summer types and 30 lb/10-ft row for winter types).

Common starting method: Direct sowing seed.

eaten fresh, while winter types can be used fresh, pickled, dried, or stored for later use in sauces, stews, and soups. All cultivars can be grown for fresh eating.

Selecting Types to Plant

The first decision a radish gardener should make is what type of radish plant to use. Fortunately, radishes grow quickly under the proper conditions and do not take up much garden space. This makes it possible to experiment with different types of radish plants several times in a single year, even if the garden area is small.

Radish plants are loosely divided into three main types: spring, summer, and fall/winter. This grouping is based on growing and harvest times. Spring radish types are planted in early spring, grown during cool temperatures, and are usually ready for harvest in 3 to 4 weeks. Summer radish types are planted in late spring, tolerate the early heat of summer, and are usually ready for harvest in 6 to 8 weeks. Fall/winter radish types are planted late in the summer when the weather cools and are usually harvested at 8 weeks or more. (Daikon radish is another name for winter types from Asia.)

Commercial seed companies offer many radish types, although selection may change from year to year. Radish types may have round or icicle shapes; red, pink, green, purple, or black skin; and taste from mild to spicy hot.

Choosing a Planting Site

Radishes require full sun (at least 6 hours/day) and loose, well-drained soil. Spring types can be planted and harvested before warm-season vegetables (for example, tomatoes and peppers) are planted in the same garden area. Spring and summer types can also be interplanted among other vegetables, to fill in gaps, as long as they are not shaded out by other plants. Winter types can be planted in garden areas that have already been completely harvested for the year (for example, lettuce and fresh peas).

Introduction

The information in this publication is presented to help home gardeners understand how to choose radish types and cultivars that are best for their garden conditions, rather than to list all the possible radish cultivars.

Radish (*Raphanus sativus*) is a vegetable that is easy to grow and comes in a wide variety of root colors, shapes, and sizes providing for a range of end uses. Depending upon the cultivar, radish can be grown in window boxes or small containers on a patio, interplanted among slower growing vegetable rows in the garden, or even sprouted year-round in jars on the kitchen counter. Because radish usually germinates in just 3 to 7 days, it is good choice when introducing children to gardening.

All parts of the radish plant are edible. Roots are most commonly eaten, but leaves can also be used fresh or in cooking. Roots of spring and summer types are commonly

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Radishes can also be sprouted in kitchen jars for fresh eating as sprouts. Most seed companies offer sprouting instructions on their websites or in their catalogs. Also, the United States Department of Agriculture (USDA) offers food safety information on the health risks associated with eating raw radish sprouts.

Planting Guidelines

Radish seeds should be sown roughly 0.5 inches apart, directly into a furrow that is 0.5 inches deep. Fill in the furrow with 0.5 inches of soil. Furrows should be 1 to 2 inches apart for spring and summer types and 18 inches apart for winter types. Gently water in the furrow soil cover, but do not apply so much water that it washes out the furrow.

Weed seeds can be discouraged from sprouting by planting radishes in blocks, rather than in long single rows, thus minimizing unplanted ground.

Refer to the *Home Vegetable Gardening in Washington* (Miles, et al. 2012) for valuable information on soil testing, preparing seedbeds, watering and fertilizing, and other general gardening tips.

Plant Maintenance

Keep the soil uniformly moist but not too wet as the seedlings grow. Uneven watering can cause roots to split or become overly spicy. Hot, dry weather can also cause radish roots to become woody and overly spicy. If left in the garden, spring and summer types will often begin to flower. At this point, the roots are no longer appetizing, no matter how they are prepared.

When radish plants are 2 inches tall, thin them so there are 1 to 2 inches between spring- and summer-type plants and 2 to 6 inches between plants of winter types. Apply a layer of mulch to reduce water loss and competition from weeds.

Pest Management

The key to effective pest management is monitoring your garden on a daily basis. Take samples of insects and symptomatic plant material to your county Master Gardener Clinic (<http://mastergardener.wsu.edu/mgpcounty.html>) for identification. Once the pest problem is identified, consult Master Gardeners or the WSU Hortsense database for management options (<http://pep.wsu.edu/hortsense/>).

Common Problems

Aphids (cabbage or turnip)

Photo: Whitney Cranshaw,
Colorado State University,
Bugwood.org



Symptoms: Leaf curls and plant lice visible.

Corrective Action: Use row covers at planting. Avoid over-fertilizing with nitrogen.

Cabbage maggot

Photo: Ken Gray Collection
Oregon State University



Symptoms: Plants wilted, leaves yellow and/or stunted soon after germination. Brown, mushy tunnels in roots, small white maggots (at harvest time).

Corrective Action: Use row covers at planting. Rotate to different part of garden at next seeding. See Hortsense (<http://pep.wsu.edu/hortsense/>) for chemical management options.

Flea beetles

Photo: Ken Gray Collection,
Oregon State University



Symptoms: Small, round holes in leaves.

Corrective Action: Use row covers at planting. Rotate to different part of garden at next seeding. Reduce weeds, especially mustard family, in garden.

Not enough water

Photo: C.H. Daniels,
WSU Extension



Symptoms: Slow growth, small roots, very strong flavor.

Corrective Action: Water regularly to keep soil moist and harvest plants earlier.

Waited too long to harvest or provided uneven watering

Photo: Marilee Schneider,
WSU Snohomish Co. Extension



Symptoms: Split or hollow roots, pithy center.

Corrective Action: Plant weekly and harvest as soon as roots are large enough. Provide uniform watering.

Long days and short nights

Photo: Joseph M. DiTomaso,
Bugwood.org



Symptoms: Flower or seed stalk forms ("bolting").

Corrective Action: Harvest spring and summer types earlier; the following year, delay planting fall and winter types until later in summer.

Harvest and Storage

Time of harvest for spring and summer radish types is determined by personal preference on root size, texture, and taste (spiciness). Roots can mature rapidly, so tasting a few roots over a span of several days will help you choose

the best harvest date. In general, the longer the plant grows, the spicier it becomes. Winter varieties should be harvested before the ground freezes and stored at 32°F and 95% relative humidity.

Radishes should be pulled by hand, and the roots should be washed before eating or storing. To increase shelf life of both the leaves and roots, remove the leaves, cool the roots in ice water right after harvest, and store the roots in a plastic bag in the crisper section of the refrigerator. Leaves should be washed and stored separately; they have a shorter shelf life than the roots.

Yields depend upon the radish cultivar that is planted and the growing conditions. Spring and summer radishes can yield up to 2 or 3 lb/10-ft row when grown under perfect conditions. Winter radishes may yield up to 30 lb/10-ft row when planted using a 6-inch spacing between plants and a 24-inch spacing between rows.

End Uses

Roots of spring and summer types are most commonly eaten fresh, either whole or sliced, in salads and vegetable trays. Winter types are most commonly chopped and used in making pickles or stir-fry.

The University of Georgia hosts the National Center for Home Food Preservation website (<http://www.uga.edu/nchfp/>), which offers research-based recommendations for most methods of home food preservation.

Additional Reading

- Craig, B. 2011. Food Preservation Resources. *Washington State University Extension Publication C1117E*. <http://cru.cahe.wsu.edu/CEPublications/C1117E/C1117E.pdf>.
- Louisiana State University Ag Center. Expected Vegetable Garden Yields. http://text.lsuagcenter.com/en/lawn_garden/home_gardening/vegetables/Expected+Vegetable+Garden+Yields.htm.
- Miles, C., G. Sterrett, L. Hesnault, C. Benedict, and C. Daniels. 2012. Home Vegetable Gardening in Washington. *Washington State University Extension Publication EM057E*. <http://cru.cahe.wsu.edu/CEPublications/EM057E/EM057E.pdf>.
- Parker, J., C. Miles, T. Murray, W. Snyder. 2012. How to Install a Floating Row Cover. *Washington State University Extension Publication FS089E*. <http://cru.cahe.wsu.edu/CEPublications/FS089E/FS089E.pdf>.
- University of Georgia. 2013. National Center for Home Food Preservation. <http://www.uga.edu/nchfp/index.html>.
- U.S. Department of Health and Human Services. Sprouts: What You Should Know. <http://www.foodsafety.gov/keep/types/fruits/sprouts.html>.



By **Catherine Daniels**, Pesticide Coordinator, Washington State Pest Management Resource Service, WSU Puyallup Research and Extension Center.

Header photos: Radish bunch (left) and daikon pile (right). Photo source: Wikimedia Commons.

Use pesticides with care. Apply them only to plants, animals, or sites as listed on the label. When mixing and applying pesticides, follow all label precautions to protect yourself and others around you. It is a violation of the law to disregard label directions. If pesticides are spilled on skin or clothing, remove clothing and wash skin thoroughly. Store pesticides in their original containers and keep them out of the reach of children, pets, and livestock.

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