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# G93-1176 Raspberries for the Home Garden

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# Raspberries for the Home Garden

This NebGuide provides guidelines for identifying and cultivating raspberries.

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Raspberries can be successfully grown in Nebraska. They are grown primarily by the home gardener and used fresh or frozen, in jams or in jellies. The red, yellow, black, and purple raspberry types are grown in eastern Nebraska, while western Nebraskans primarily grow only red berries.

This publication is not intended for the commercial grower but is, instead, targeted towards home gardeners who have limited space for raspberry production.

Red raspberries are widely grown in Nebraska. Red raspberry canes are upright, slender, and light brown. Most cultivars sucker readily from the roots of the parent plant. The berries are red, somewhat soft, and have good quality. Yellow raspberries have the same characteristics as the reds. Raspberry cultivars that produce a crop on current season's growth the first fall after they are planted are called everbearing. Some cultivars grown in Nebraska are discussed below.

'Taylor' is a vigorous, winter hardy, and productive red raspberry. The berries are large, bright, attractive, firm, and high quality. Although it is susceptible to the common foliar and cane diseases, 'Latham' is a very winter-hardy red raspberry. It is subject to mosaic virus but is productive. The berries are above average in size and are both firm and attractive. The flavor is somewhat tart, but the quality is good.

Raspberries that produce a crop the first fall after planting are called everbearing. Two everbearing cultivars are 'Heritage' and 'Fallgold'.

'Heritage' (everbearing) is a vigorous red raspberry with sturdy, erect canes. The berries are medium-sized, very firm, medium-red, with good flavor. If grown only for a fall crop, foliar and cane diseases are readily controlled.

'Redwing' (everbearing) is more heat resistant than Heritage and the fruit less subject to sunscald. The berries have good flavor but are less firm than Heritage. If grown only for a fall crop, foliar and cane disease are readily controllable.

'Fallgold' has sturdy, erect canes. The berries are medium sized, golden-yellow with good flavor. Fallgold is subject to the same diseases as Heritage, Taylor, and Redwing; and the cultivar is not as heat resistant as Redwing.

The black raspberry has vigorous, purplish-colored canes that branch readily when pinched back. The canes are usually long and arching. The tips of the canes, when covered with soil, will develop roots and start new plants. The fruit is black and firm. Black raspberries are not as winter hardy as red raspberries and are also highly susceptible to foliar and cane diseases as well as viruses.

Bristol is not only one of the hardiest black raspberries, but it is also vigorous-growing and highly productive. The good-quality, glossy-black berries are large, firm, and attractive. They may be difficult to pick unless fully ripe.

'Allen' plants are productive and vigorous. The berries are large, attractive, and of good quality. This variety is slightly earlier than Bristol.

Purple raspberries are hybrids of red and black raspberries. Some of them sucker like the red raspberries while others root at the tips of the canes like the black raspberries. The fruit is purplish and of good quality. Purple raspberries are subject to foliar and cane diseases, but the plants are very vigorous and yield considerably more than either red or black cultivars.

'Royalty' is a new purple raspberry with delicious flavor, very large fruit, and high productivity. It is excellent for fresh use as well as for jam and jelly and is resistant to mosaic-transmitting aphids and raspberry fruit worm.

'Sodus' has vigorous, upright plants that are very productive and hardy. Berries are firm and of good quality, but quite tart. 'Brandy wine' is a high quality purple raspberry. It ripens later than most red or black varieties. The cultivar is aphid susceptible. The fruit is large, firm, quite tart, but of good quality. It is excellent for jams or jellies.

### **Establishment**

A wide range of soil types is suitable for growing raspberries. The ideal environment, however, would be a well-drained loam soil, high in organic matter, with a deep and well-drained subsoil.

Begin by selecting a planting site with full sunlight. Good air drainage is important in reducing damage from spring frosts, winter injury, and diseases. Some wind protection is recommended to reduce possible breaks or cane desiccation.

Do not plant raspberries in soils formerly used to grow potatoes, tomatoes, peppers or eggplant. The wilt diseases that affect these crops also affect raspberries, and the fungus and virus that cause the diseases may remain in the soil for many years.

Prepare the soil to a depth of eight to ten inches and plant the raspberries in the spring as soon as the soil can be worked. Set red raspberry plants two inches deeper than they were in the nursery. Set black and purple raspberries the same depth as they were in the nursery or no more than one inch deeper. Spread out the roots and carefully firm the soil around them. Do not allow the roots to dry out.

Cultivate raspberries frequently enough to prevent grass and weeds from developing around them. Use shallow cultivation to avoid harming roots. Do not cultivate in the fall. This tends to stimulate new growth, which is susceptible to winter injury.

In late November, cover plants with straw or leaves to a depth of 6 inches. In spring and summer, maintain a 4 inch mulch layer to reduce soil moisture loss and aid in controlling weeds. Mulching partially reduces the need for cultivation and can also help increase yields.

Irrigation is necessary. Apply 1 1/2 to 2 inches of water once a week during the fruiting season and once every two to three weeks during the rest of the season if rainfall is inadequate.

Manure from a stable, if available, is a good fertilizer for raspberries. Apply the manure dry and at the rate of 1 pound per square foot. The use of a commercial 10-10-10 fertilizer is also recommended. For the commercial fertilizer, apply 2 to 3 pounds of actual nitrogen per 100 feet of row. Apply fertilizer in the late fall after growth has stopped or in early spring before growth begins.

## **Harvesting**

Raspberries, depending on the variety, can be harvested from late June through September. Pick raspberries when they are dry and as soon as they separate easily from the clusters. At the peak of the season, they can be harvested two to three times a week. Handle berries very carefully and either place them in cold storage or use them without delay.

### **Planting Systems**

In Nebraska, the preferred planting systems for raspberries are the narrow hedgerow and the linear hedgerow. The narrow hedgerow system is very popular with red raspberry cultivars. This system consists of a continuous row of canes in a strip no wider than 18 inches at the base. Red raspberries adapt well to this system because of the suckers that form from the roots. Also, the narrow row makes picking the fruit easier and reduces disease problems. Set the plants 2 to 3 feet apart in the row and space the rows 6 to 10 feet apart.

The linear hedgerow system is a modification of the narrow hedgerow system. Both black and purple raspberries are usually grown by this method. Plants are spaced 4 to 5 feet apart in the row with rows 6 to 10 feet apart. Suckers are allowed to develop only at the base of the parent plants. The width of the row is also restricted to the parent plants.

# Support System\*

The wire trellising system is practical with the hedgerow planting system in Nebraska. This is important where high winds are a problem. The cross-arm, two-wire system is common. Set the posts 20 feet apart in the row, with 3 1/2 to 5 feet of the post above ground. Attach an 18-inch long cross-arm near the top of each post. Attach a No. 9 wire to the ends of the cross-arm along each side of the row. Train the canes between the wires or tie the canes to the wires. A trellis of two wires, one above the other on the same post, is also used. The canes can then be tied to the wires.

## **Training and Pruning**

Canes of raspberries are biennial in nature; the crowns are perennial. New shoots grow from buds at the crown each year. Late in the summer, the new canes develop lateral branches with fruit buds on them. Early in the second season, fruit-bearing shoots grow from these buds. After fruiting, the old canes die, and new shoots spring up from the crowns.

These fruiting canes may be removed any time after harvest. They should be cut off close to the base of the plant, removed from the planting, and destroyed.

## Red-Yellow Raspberries (One Crop Type)

### **Pruning During the Growing Season**

Do not pinch back (reduce the height) the current season's growth. If the canes are too tall to support themselves, it is better to construct a trellis than to reduce the height. Remove canes from which fruit has been harvested. This is usually in late June through early July, depending on the cultivar and weather. Removing canes allows better light penetration into the hedgerow for the newly developing shoots and can help reduce disease.

#### **Dormant Season Pruning**

Prune in late winter or early spring after the danger of severe weather has passed and before bud swell. Pinch back (remove) the winter-killed portion of the canes. Usually, this will be 1 to 3 inches of the cane tip. However, after severe winters or if you have attempted to grow non-hardy cultivars, 3 to 4 feet of the cane may have been killed.

If the plants are grown in hedgerows, keep the width of the rows to 18 inches or less and remove all plants outside the row areas. Remove small spindly canes, leaving those that are 1/2 inch or more in diameter. Leave four large canes for every foot of hedgerow.

The new shoots or suckers should be reduced in number (thinned) immediately after fruit harvest. Leave four or five strong canes, 1/2 inch in diameter or greater, per foot of hedgerow. If no such canes are present, leave the two largest canes.

## **Everbearing Red Raspberries**

This raspberry can be managed to produce two crops a year, with one crop in early July and the other in late August or September. However, it is generally better to obtain one crop a year. This method sacrifices the lighter and lower quality summer crop for a heavier fall crop.

#### **Dormant Season Pruning**

During its first year, do not prune but allow your planting to establish itself. The following year and each year thereafter, prune the stand in late winter (early to mid-March) while the ground is frozen and before new growth has begun. By hand, rotary mower, or other mechanical device, remove all aboveground growth. A 1- to 2-inch stub will usually remain after mowing. In August or early September, fruiting will occur on the current season's growth.

## **Black and Purple Raspberries**

### **Pruning During Growing Season**

Black and purple raspberries require summer pruning or pinching back of the current season's new shoots. Remove the top 4 inches of the new shoots by hand (wearing gloves) or with pruning shears when the shoot is 30 to 36 inches tall for purple and 18 to 24 inches tall for black raspberries. This pruning promotes the development of strong, lateral branches.

#### **Dormant Season Pruning**

Do this pruning in late winter or early spring after the danger of severe weather is past and before bud swell. Reduce the length of lateral branches. For black raspberries, leave an 8-inch lateral after pruning. Be prepared to remove a sizable amount of plant material, as the laterals may have grown to 8 feet or longer. Laterals of purple raspberries are pruned back to 10 to 18 inches. Remove all spindly laterals. This severe pruning practice improves both the size and quality of the fruit.

\* See also NebFact 185

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