

HORTICULTURE FACT SHEET
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Raspberries

Raspberries grow well in most areas of Minnesota, although they are not well adapted to locations with hot, dry summers and severe winters. They belong to a large group of fruits known as brambles. The three main types—red, black and purple—are grown in Minnesota; however, the red raspberry is by far the most popular and successful.

PLANTING SITE

Almost any soil is satisfactory for growing raspberries. In fact, the subsoil is more important than the surface soil. It should be well-drained but not too sandy unless irrigation is available.

Select a gently sloping area with good air drainage. Poor air drainage often increases the chance of late spring frost injury and the occurrence of diseases such as anthracnose and spur blight.

RECOMMENDED VARIETIES

Selecting the right variety depends upon your fruit district (figure 1) and how you plan to use the berries.

Varieties	Fruit Zones			
	1	2	3	4
Red Raspberries				
Fallred (fall-bearing)	X	X	X	T
Heritage (fall-bearing)	X	X	T	T
Newburgh	X	X	X	
Boyne	X	X	X	X
Latham	X	X	X	X
Black Raspberries				
Bristol	X	X		
Black Hawk	X	X		
Purple Raspberries				
Amethyst	X	X	X	
Sodus	X	X	X	X

X = recommended as suitable
T = suggested for trial

For additional information, see Horticulture Fact Sheet No. 3, "Fruits for Minnesota."

PLANTING

Plant raspberries in the early spring as soon as the soil can be worked. Plant only highest quality nursery stock. Since virus diseases are serious in raspberries, use only healthy, disease-free plants. Obtaining plants from an abandoned patch can be costly, as they often are disease-infected.

If possible, plant in soil cultivated the previous season. It should be free of weeds, especially perennials such as quackgrass. Work into the soil liberal quantities of manure or other organic matter.

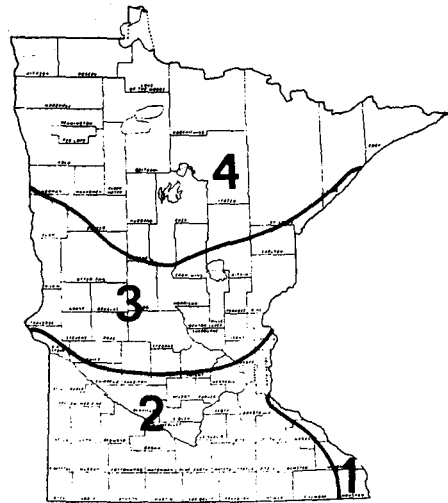


Figure 1. Minnesota Fruit Zones

Plant as soon after arrival as possible; never let the roots dry from exposure to air. Spade a deep slit in the soil, place the plant, and carefully fan out the roots. Set the plants slightly deeper than they were in the nursery. Remove the spade, and firmly press the soil around the roots. Cut back the tops to within 4 to 6 inches of the ground to encourage the production of vigorous, new canes.

PRUNING AND TRAINING

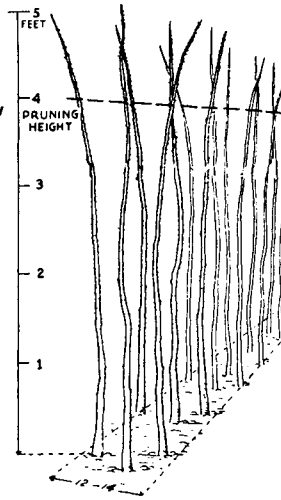
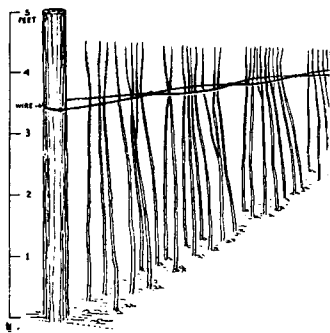
The two training systems commonly followed in Minnesota are:

Hedgerow — New plants are set 2½ feet apart in rows 6 to 9 feet apart. The spread of each row is limited by cultivation and pruning to about 1½ feet. With no support (unsupported-hedgerow), cut back the canes to about 4 feet in the spring before growth starts. With support (wire-trellis-hedgerow), posts are about 16½ feet apart in the rows with a wire at 3½ feet on either side of the post. The canes are placed between the wires which are tied at intervals to prevent cane spread. The tops are cut back to about 12 inches above the wire in early spring.

Hill — Raspberries are easier to keep weed-free if planted in hills instead of rows. Space plants 4 to 6 feet apart each way. In the spring tie the canes with binder twine or strips of cloth to a stake driven into the center of the hill (staked-hill). Cut the canes back to about 5 feet. Many red raspberry varieties are

Figure 2 (below). Wire trellis-hedgerow system.

Figure 3 (right). Unsupported-hedgerow system.



stout-caned and may be grown in hills by tying the canes together about 3 feet from the ground and again about 6 inches higher (teepee-hill). Cut the tops back to about 4 feet from the ground.

Black and purple raspberries need not be tied; top at 24 inches to keep them in the form of a compact bush and from growing too tall. In the early summer when new shoots have grown out about 2 feet, cut out the tip to induce the formation of many side branches. In the next season (spring, before growth starts), cut these side branches back to within 12 inches of the main cane. Fruit from pruned side branches is larger than from unpruned side branches.

THINNING

Raspberry canes grow the first year, fruit the second, then die. To thin red raspberries, remove the old canes as soon as the fruit is harvested. The new canes and suckers also should be thinned, leaving 6 to 8 strong canes per foot of hedgerow and about seven strong canes per hill.

To thin black or purple raspberries, after harvest, remove all canes that have borne fruit. Select 4 or 5 new canes per plant and remove all others.

Fall-bearing varieties do not conform entirely to the usual red raspberry pattern. The fall crop is produced on canes that developed the same season; the following spring, another crop is produced on the same canes. Healthy, vigorous plants can produce heavy crops both times. If only a fall crop is desired, cut the canes to the ground in the early spring; this eliminates the summer crop completely.

If both summer and fall crops are desired, thin the canes the same way as ordinary red raspberry varieties, following the summer harvest. The shoots that bear the fall crop should not be removed as they will bear again the following summer.

FERTILIZING

For maximum yields, fertilize your plants every year. Use a balanced fertilizer such as 10-10-10, at the rate of about 5 pounds per 100 feet of row or about ½ cupful around each hill. Broadcast the fertilizer between rows and work it in the soil about May 1.

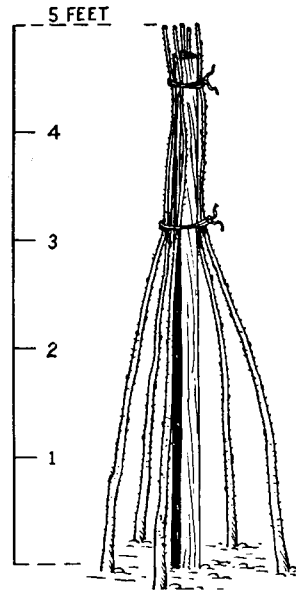


Figure 4 (left). Staked-hill system.

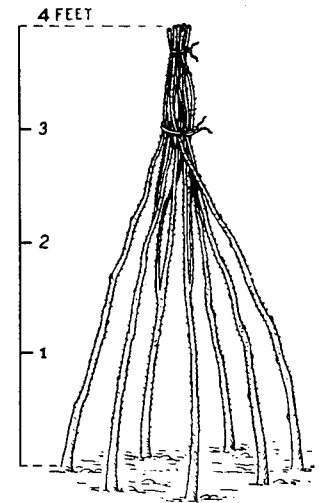


Figure 5 (above). Teepee-hill system.

PREVENTING WINTER INJURY

Raspberry plantings in Minnesota may need protection from alternating cold and warm periods in late winter. Usually the canes can be protected by bending them over and holding them close to the ground with clods of dirt in late October or early November before the ground freezes. The earth clods are removed in the spring.

INSECTS AND DISEASES

Although raspberries have few insect pests, diseases are numerous and troublesome. For additional information, see Extension Folder No. 375, "Home Fruit Spray Guide," and Plant Pathology Fact Sheet No. 8, "Raspberry Diseases."

CULTIVATION AND HERBICIDES

A successful raspberry planting should be free of weeds. Cultivation (including hoeing and weeding) is effective but must be repeated several times during the season. Cultivation in addition to weed control prevents canes from developing all over the raspberry patch. Too much cane development results in competition for moisture, minerals, and sunlight, and the berries are often small and inferior. Never cultivate deeper than 2-3 inches.

Chemical weed control is effective in raspberries. However, weed killers (herbicides) should supplement cultivation, not replace it. They are most useful in controlling certain annual and perennial weeds within the rows or hills. Cultivate between the rows regularly even though a herbicide is used.

Simazine and Casaron are effective in controlling germinating weeds in established plantings. In addition, they are generally effective against certain emerged and perennial weeds, such as quackgrass. Both can be purchased from your local nursery or garden center. Read the label on the container thoroughly and follow the directions carefully.

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