

RASPBERRIES FACT SHEET

Raspberries are a very popular fruit in home gardens. Because they are so labor intensive, commercial planting has declined in recent years and they are scarce and expensive. They require smaller areas and fewer pest control sprays so are more practical for home gardeners than tree fruits. There are three main types of raspberries: red, black, and purple. Yellow raspberries are a variation of the red raspberry and differ only in fruit color.

Red raspberries are most commonly grown in Utah. They have erect canes and are propagated by suckers which grow from the roots of the parent plant. Cane bearers produce a single summer crop on canes which grew the previous year. Everbearers produce a light spring crop on the year-old canes and a larger fall crop on the canes which grow the current year.

Black raspberries (also called blackcaps) produce arched canes which form new plants when the tips of the canes root in the soil. Purple raspberries are hybrids of red and black raspberries and propagate in the same way as the black.

SOIL MANAGEMENT: All raspberries prefer deep, well-drained soils. They do not do well in heavy clay or poorly-drained soils. Avoid soils with a high pH (above 7.9) because of serious iron chlorosis problems.

It's work, but if you're determined to grow raspberries in a heavy, poorly-drained soil, you'll have a good chance of success if you do this: (1) Spread a 2-inch layer of sawdust, shavings, peatmoss, leaves or other natural organic material over a 5-foot width the length of your row. Add 2 lbs. of ammonium sulfate on each 100 square feet. (2) Add 2 inches of sand. (3) Incorporate to a depth of 10-12 inches by tilling, thorough spading, etc. (4) Rake the outer edges toward the middle, forming a bed about 3 feet wide.

With the elevation gained, roots will grow better because the soil is better drained and the organic matter helps reduce alkalinity. The loose soil may dry faster in the summer, so be prepared to apply adequate irrigation.

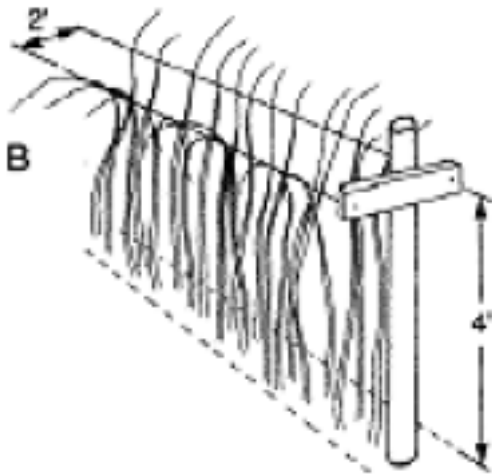
Soils should be deeply tilled and free of perennial weeds. Do not plant where raspberries, blackberries, tomatoes or potatoes have been grown recently. Black and red raspberries should not be grown next to each other because of disease problems. Mulching with straw, grass clippings, leaves or other organic materials will control weeds, conserve moisture and increase yield. Additional nitrogen must be applied to break down the organic matter as it is incorporated into the soil. A permanent mulch will produce the highest yield because weed competition is reduced and cultivation does not damage shallow roots. Weeds should be controlled early to ensure highest production. Hoeing and shallow tilling are satisfactory for small plots. Herbicides may be practical in larger plantings. For more information consult EC 302, "Utah Weed Control Handbook." When using any weed killers, be sure to follow label recommendations.

PLANTING THE BERRIES: For maximum productivity and longevity, obtain virus-free plants from a reputable nursery. Starts strained from old beds often transfer diseases which seriously limit production. Choose recommended varieties and purchase high quality plants. Bare root plants are less expensive and will grow well if they are handled properly and planted early. Raspberries may be grown in rows or in hills.

Red raspberries are usually trained to hedge-type rows. Plants are placed 2-3 feet apart in the row and the plants are allowed to sucker and fill in the row. Width of the hedgerow should be 12-18" for everbearers and 18-24" for June bearers. Black raspberries are best trained to a hill system with plants placed 4-5 feet apart in the row. The distance between the rows is determined by what type of equipment is used to maintain the planting. Hand equipment needs about 5 feet between rows while tillers or tractors will need up to 10 feet between rows.

Purchase plants when the soil is ready. Do not let the roots dry out. If the roots do dry, soak them for several hours to improve survival. Cut stalks back to about 6" and place the plants in the hole. Roots should be spread out and the plants placed about 1" deeper than they were grown in the nursery.

PRUNING & TRAINING: Summer or June-bearing red raspberries should be allowed to produce long healthy canes. These canes may be trellised if necessary so they do not fall over.



Red raspberries are frequently supported by two parallel horizontal wires about 18 inches apart held by crossbars. Headed canes are pulled up between the wires. With a one-wire trellis, no crossbar is used and canes must be bed to wire.

Do not prune new canes during the first season. In the spring of the second season cut them to a height at which they support themselves, usually about five feet. Trellised berries may be allowed to grow longer if desired. Remove weak, spindly canes and save the large, sturdy ones uniformly spaced 3-4 inches apart.



LEFT: Red raspberry plant before thinning and pruning.

RIGHT: The same plant after thinning and pruning.



LEFT: Black raspberry plant before pruning.

RIGHT: The same plant after pruning.

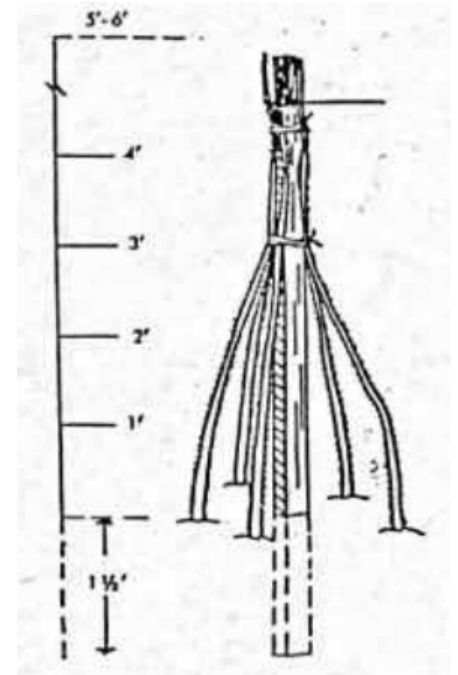
A red raspberry trained and pruned staked-hill system.

After the canes fruit in June or July, they will die. Remove them to reduce insect and disease problems.

Everbearing raspberry canes are removed after fruiting in July, just as the summer bearing type. The fall crop will grow on the current season's growth, so save healthy green shoots.

An alternative pruning method will bypass the light summer crop and you'll get a higher yield of larger, better quality raspberries in the fall harvest. Prune all canes at a height of three or four inches in March. This puts the vigor of the plants into a heavy fall crop. Pruning is very easy and you'll reduce insect and disease problems.

Black and purple raspberries should be topped during the summer to form a branched cane which will produce more fruit and keep it off the ground. Black raspberries are cut at 24-30 inches while purple raspberries are cut at 30-36 inches. The canes should be thinned to 4-6 canes per hill. In the spring, shorten the branches on the canes to about 10-12 inches. Leaving these canes too long will reduce fruit size. After the crop is harvested, remove the old fruiting canes at the soil line.



FERTILIZING: You need to apply nitrogen every year in Utah. Use one cup of ammonium sulfate 21-0-0 or 2/3 cup of ammonium nitrate 34-0-0 per 10 feet of row. The amount should be reduced if cane growth is excessive. Raspberries may need phosphorous and potassium in some areas. Substitute 1 & 1/2 cups of 16-16-8 or equivalent every third or fourth year. Organic fertilizers such as manure or compost supply nutrients but may aggravate chlorosis problems and introduce weed seeds.

IRON CHLOROSIS: Iron chlorosis is a serious problem. The raspberry leaves turn yellow while the veins of the leaves remain green. The problem can be reduced by avoiding heavy, high alkaline soils or overwatering. Under some conditions plants may need treatment with an iron compound. Spray the leaves with iron-containing compounds such as iron sulfate, using five tablespoons per gallon of water. Spray as soon as the leaves turn yellow and at one-week intervals as necessary. Spray should be applied in early mornings, late afternoons or on cloudy days to avoid burning the foliage. Do not apply iron after fruit is set. Other iron compounds may help if applied as foliar sprays but they are also only temporary. Sequestrene Fe 138 is an effective soil treatment but is very expensive. It is applied at the rate of 1 lb. per 100 feet of row and usually lasts two years. Iron-Sul, a new granular product, has corrected some problems if it is applied and incorporated prior to planting. Follow package directions for recommended rates.

IRRIGATION: Raspberries draw most of their moisture from the top two feet of soil, so keep it well supplied with moisture just prior to and during fruiting. On a medium-textured loam soil, a weekly watering is usually needed during the summer fruiting period. Sandy or gravel soil must be irrigated more often, while heavy, clay soils need watering less frequently. Raspberries use about two inches of water per week during peak production. During non-fruiting periods, irrigation may be needed only every two to four weeks. Overwatering will -----

HARVESTING: Raspberries need to be harvested every two to three days during peak production

periods. Ripe berries will separate easily from the receptacle which remains on the plants. Use the thumb, index finger and middle finger to pick the berries and carefully place them in containers. Berries should be refrigerated as soon as possible to prevent loss of quality, molding or decay. Berries will keep two to five days if they are refrigerated but should be used or processed as soon as possible.

RASPBERRY DISEASES

DISEASE	CHEMICAL	REMARKS
Fruit Rots	Benomyl	During wet periods.
Powdery Mildew	1. Benomyl 2. Sulfur	Follow label. After harvest or in cool weather.
Leaf Curl, Mosaic Virus, Crumbly Berry	No Chemical Control	Plant only disease-free plants from virus-free nurseries. Remove and destroy infected plants. Do not plant new plantings within 50-100' of infected plants or in soils where infected plants have just been removed.
Root Rot or Die Back	No Chemical Control	Plant disease-free plants in fertile, well-drained soil where cane fruits have not been grown for several years. Fertilize and irrigate properly to keep plants vigorous. Do not overwater.
Stem Gall	No Chemical Control	Avoid over-irrigation and placing soil against canes.

PESTS	CHEMICAL	REMARKS
Aphids	1. Malathion 2. Diazinon	
Cane Borer	No Chemical Control	Remove and burn affected.
Crown Borer	Diazinon	Apply as a drench to crown of plants in early spring.
Cane Girdler	Sevin	Remove and burn affected canes by mid-April. Spray first or second week of May just before bloom.
Earwigs	Sevin	



NURSERY • GARDEN CENTER • LANDSCAPING

1410 N 1900 W St, Farr West, UT 84404
Phone: (801) 782-4149

www.loveyourgarden-jn.com