GROWING RASPBERRIES, GOOSEBERRIES AND CURRANTS IN NORTH CENTRAL TEXAS

Cane and Bush Fruits Are the Berries; Often It's Grow Them or Go Without

Raspberries and gooseberries are excellent sources of Vitamin C. Raspberries and blackberries may be used fresh, canned, frozen, or in pies, jellies, jams or preserves. Gooseberries are used mainly in sauces and pies.

These fruits vary greatly in hardiness to low winter temperature. Gooseberries are the hardiest and can withstand -40°F. and still be productive. Dorman red raspberry is next in hardiness. Blackberries may be injured around -15°F while thornless blackberries and boysenberries may be injured when the temperature falls close to zero.

All cane fruits may be injured at somewhat higher temperatures than indicated if they receive poor cultural care during the growing season. However, they may withstand temperatures 5° to 10°F. lower than indicated if properly hardened or given some winter protection.

Success of a cane fruit planting depends largely on selection of the proper varieties for your area. Varieties differ greatly in berry quality and size, season of ripening, hardiness to low winter temperature, and disease susceptibility. Growth and yield are influenced by length of growing season, temperature, rainfall and humidity.

During recent years, breeders have developed some varieties of thornless blackberries which are very vigorous and productive. The weakness of these varieties is a tendency to injury during winter by temperatures near 0°F. However, the home gardener can cover these canes with mulch during winter and the buds and canes will survive at temperatures much lower than 0°.

The most important soil factor for growing Dorman red raspberries is good drainage to a depth of 3 feet. Plants in full leaf will not tolerate standing water or a high water table for 2 to 3 days without root injury, subsequent decreased yields, and perhaps death of the plant. Dorman red raspberries tolerate a wide range of soil types from clay to sand if drainage is good.

Currants and gooseberries tolerate a heavier soil and poorer drainage than cane fruits.

The most suitable soil is a sandy loam, rich in organic residues, with a good moisture-holding capacity and a pH of 5.5 to 6.8.
Select a site for planting in which perennial weeds have been eliminated and where tomatoes, eggplants, peppers and potatoes have not been grown within the previous two years. These crops build up a fungus disease known as verticillium wilt which damages or kills many cane fruit varieties. A location in full sunlight is desirable, although cane fruits will thrive in areas shaded for part of the day. Gooseberries and currants should be planted on the north or northeast side of the landscape or orchard. Only a few varieties should be tried to see if they are heat tolerant.

Buy plants from a reliable nursery. This is a key to success in bramble fruit production. The disadvantages of poor stock can never be overcome by a good site or even superior cultural knowledge. Be sure plants come from certified or inspected stock.

Prepare the site by growing cultivated crops at least a year before planting cane fruits. Work 1 inch or more of organic residues such as lawn clippings, rotten leaves, or well rotted manure into the top 4 to 6 inches of soil. Before planting, mix about 1 pound of 10-10-10 or equivalent fertilizer per 100 square feet of soil. If the soil reaction (pH) is under 5.5, add limestone or hydrated lime as indicated by a soil test. If the soil reaction (pH) is over 7.5, add sulfur or sphagnum peat moss as indicated by a soil test. Your county Extension office or a reputable garden store can suggest how to go about having a test made.

Plants are usually obtained and planted in late winter or early spring. If they arrive before soil preparation or when the soil is too wet for planting, store the plants --if well wrapped-- in a cool place. If unpacked, heel them into the ground in a shallow trench in a cool shady area so the roots do not dry out.

Set plants in home orchard rows with 30 inches between plants in the row for Dorman red raspberries and blackberries, 3 to 4 feet between plants for currants and gooseberries, and 5 to 8 feet for trailing and thornless blackberries.

Space between rows will vary from 6 to 10 feet depending on cultivation equipment. Nine to 10 feet between rows is usually adequate and helps to prevent spread of fungus diseases which tend to be prevalent with the plantings in closer rows.

Set plants in the ground to a depth of 5 to 6 inches, or at least 1 inch deeper than the plants were grown in a nursery row.

Dorman red raspberry develops many new plants from root suckers, and is usually grown in a hedgerow system. New suckers developing along the row are controlled either by cultivation or timely mowing to keep the row of new canes 6 to 18 inches wide.

Cane fruits have an unusual growth habit. The canes are biennial and the roots perennial. The new canes are known as primocanes. The next year these canes are known as floricanes.
Buds on floricanes develop shoots with leaves and terminate in flowers. After the canes have fruited they die. Remove them at this time or when pruning in winter.

Obviously new primocanes are being formed each year. Primocanes on thornless blackberries, dewberries, and boysenberries tend to grow along the ground. The next year these canes are tied along the trellis where they fruit. After the canes have fruited they may be removed and destroyed.

Pruning

You prune Dorman red raspberry quite differently from black and purple raspberry. Tips of the primocanes are not pruned the first year. Dorman red raspberries may be grown without a trellis, but a better crop will be obtained with less damage from fungus diseases if the raspberries are confined to a row 6 to 9 inches wide. The canes are secured to a vertical trellis with the bottom wire at 36 inches and the top wire at 60.

Dorman red raspberry normally is pruned in late winter. Remove old fruiting canes and new canes which are damaged or weak. Leave only 2 to 4 robust canes, preferably 2 canes per foot of row. Tie these canes securely to each wire.

Sometimes Dorman red raspberry is grown in a hedgerow 18 to 24 inches wide. A horizontal trellis may be used with wires 36 to 42 inches above the ground. Frequently a trellis is not used and the fruiting canes are pruned to a height of 36 to 42 inches so they stand upright when loaded with fruit. This is a cheap and simple system but the plants are subject to fungus diseases.

Boysenberry, dewberry, thornless blackberry and youngberry are usually trellised. Fruiting canes are separately wrapped around the wire and tied along the bottom and/or top wire of the trellis. Allow new canes to grow along the row on the ground during the first year. Remove old canes after fruiting.

Currants and gooseberries are perennial bushes. Usually you remove canes or branches after the fourth year. A mature bush might consist of 12 to 15 branches under 4 years of age. You usually prune gooseberries in early spring before growth starts.

All these berries may be grown under clean cultivating or a permanent mulch. The average homeowner has many organic residues around the home such as lawn clippings, leaves or shredded vegetation. A Dorman red raspberry planting is an ideal place to use these materials.

If you grow Dorman red raspberries under clean cultivation, the area between rows is cultivated to a depth of 1 to 2 inches at intervals of 2 weeks from early spring to end of the harvest season. This controls weeds and raspberry suckers in the row. If you use sod culture, mow the area between the row like a lawn throughout summer to control growth of weeds, grasses and suckers. Where a permanent mulch is used, mow at timely intervals to control raspberry suckers between the rows.

Highest yields will be obtained with permanent mulch. Clean cultivation is the next highest in yield.
Two Cautions

A key to cane fruit is a weed-free planting given tender loving care the first half of the season and then somewhat neglected the second half after the berries are harvested. Serious mistakes are using too much nitrogen fertilizer, and cultivating after the last of August.

Cane fruits respond to timely irrigation during periods of drought. Water may be applied by soaker hoses or trickle irrigation.

Sprinklers are easier to operate and faster, but if the foliage is wet for extended periods the plants are more susceptible to certain fungus diseases. It is suggested the homeowner irrigate by soaker type hoses or trickle irrigation.

Probably the best system is drip or trickle irrigation, which applies a few gallons of water a day. It requires very little water at very low pressure. With drip or trickle irrigation the water is applied along the row at intervals of 18 to 24 inches. It does not wet the entire surface.

Most people recognize the importance of irrigation between bloom and harvest for the fruiting canes. But irrigation may be need from May to September for adequate growth and development of the primocanes which are next year's fruiting canes. A permanent mulch controls weeds and reduces water loss by evaporation from the soil's surface.

A Dorman red raspberry planting usually responds to 1 to 2 pounds of 10-10-10 fertilizer or equivalent applied per 20 feet of row in early spring before start of growth.

Harvest Dorman red raspberries when the fruit is ripe, usually about the end of strawberry season. Dorman red variety will produce fruit over a 17- to 25-day period. Blackberries ripen after raspberries.

If you laid out a good variety planting of Dorman red raspberries, blackberries and thornless blackberries, you can have fresh berries for your table almost daily from strawberry season until late June.

Currants and gooseberries are ripe when soft, well colored, and tasty. In making jelly, some people like tart berries which are not fully ripe. Others prefer berries that are fully ripe and high in sugars. Few people are aware that immature gooseberries, "hard as marbles," make a tastier pie than ripe berries.

Yields per plant will differ greatly depending on variety and cultural care. Dorman red raspberries and blackberries should average a quart or more of fruit per plant. Thornless blackberries and boysenberries may produce somewhat lower yields. A mature currant or gooseberry plant should yield 4 to 6 quarts a year.
Dorman red raspberry planting may be productive for 7 to 12 years. Gooseberries should be fruitful and productive for 12 years, and in some home gardens the same bush has been productive for 20 years. Heat and drought, along with mild winters, can shorten the productivity of gooseberries and currants in North Central Texas.

Remove any plants that become unproductive. Buy new plants and set them in a different location.

Ripe fruit is prized by birds, mice, and raccoons. If birds are a serious problem, obtain netting with 3/4- to 1-inch mesh and cover the planting. An electric fence with wires at a height of 5 and 10 inches is effective in keeping raccoons and similar animals away. Mice are likely to be a problem with a permanent mulch.

Mice and bird problems can be solved in part by owning a cat which travels through the garden. Presence of the cat tends to keep birds away. If mice are a serious problem, apply a prepared mouse bait under the mulch.

It is likely that a few birds and a few mice will have to be tolerated. You might try to grow a little more fruit and share with the birds. Birds often are helpful in controlling certain insects.

Many insects and diseases damage cane fruits. Only a few of these problems are likely to occur in a given area. You might attempt to grow these fruits without pest control treatments until a problem arises, then have the problem identified by the county Extension office or a good garden store.

You can avoid many pest problems by: (1) planting only quality nursery stock; (2) keeping plants well spaced with a narrow wall of foliage well exposed to light; (3) use nitrogen fertilizer at a light to a moderate rate; (4) removing diseased or sick plants and all cane after they have fruited, either burns them or removing them; (5) allowing a few birds to live in the vicinity of the garden; (6) replanting with quality stock every 5 to 7 years; and (7) being cautious about accepting a plant from a friend because it may be diseased.

Dorman Red Raspberries
(See back for Disease Spray Schedule)
### Disease Control Guide for Blackberries & Strawberries

Dr. Norman L. McCoy, Extension Plant Pathologist  
Texas A&M University Research & Extension Center  
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<table>
<thead>
<tr>
<th>Application &amp; Timing</th>
<th>Disease</th>
<th>Material &amp; Quantity/3 gal. water</th>
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<tbody>
<tr>
<td>Dormant</td>
<td>Orange rust, Anthracnose, Leaf Spots</td>
<td>Fixed Copper, 1½ tbsp. or Fermate, 4 tbsp.</td>
</tr>
<tr>
<td>Pre-Bloom</td>
<td>Orange rust, Anthracnose, Leaf Spots</td>
<td>Same as Dormant</td>
</tr>
<tr>
<td>Post-Bloom</td>
<td>Same as Pre-Bloom</td>
<td>Same as Pre-Bloom</td>
</tr>
<tr>
<td>First, Second &amp; Third Cover Sprays (approximately 14 days apart)</td>
<td>Leaf Spots, Fruit Rots</td>
<td>Phaltan, 3 tbsp.</td>
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</tbody>
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**Strawberry varieties that have resistance to certain diseases are:**  
Sunrise, Pocahontas, Dixieland, Blakemore, Ogallala

Left, Gooseberry at time of harvest. Below, White Imperial currant.