

advertising and sales claims on nursery stock, the American Association of Nurserymen in cooperation with the Council for Better Business Bureaus has recommended standards which include:

- When a plant has a well recognized common name it should be used. If an advertiser coins a new name, the common name or the complete botanical name should be included.
- A guarantee should be limited to obligations the seller can and will fulfill. It should clearly and conspicuously disclose the nature and extent of the guarantee, the manner in which the guarantor will perform, and the identity of the guarantor.
- No reference to "nursery" or "nurseries" should be made for trees or shrubs collected from the wild state and sold without cultivation in a nursery. "Nursery stock" is that which is grown under cultivation, or transplanted from the wild and grown under cultivation for at least one full growing season.

There are many sources of information on the characteristics and description of plants as well as information on the planting and care of various kinds of plants. Horticultural and gardening magazines are valuable for this purpose, as are the public libraries.

Most metropolitan newspapers carry good gardening columns with the writers adapting the recommendations to local climate and soil conditions.

Many plant societies maintain libraries, have membership publications, and hold educational meetings. Among these are the American Boxwood Society, American Rose Society, the Holly Society of America, Inc., the American Camellia Society, American Horticultural Society, Men's Garden Clubs of America, Garden Club of America, National Council of State Garden Clubs, Inc., and the Women's National Farm and Garden Association, Inc.

For information on addresses of these as well as other organizations consult your local library. Or you may wish to purchase the *Directory of American Horticulture*, available from the Ameri-

can Horticultural Society, Inc., Mount Vernon, Va. 22121.

Another valuable source of information adapted to a local area is the Cooperative Agricultural Extension Service Office in each county of the United States. For the phone number look under your county government listing in the phone directory.

In the United States there are over 100 major arboretums and botanic gardens maintaining outstanding plant collections and display gardens, and providing horticultural information.

Retail garden centers and landscape firms often answer questions and work with garden clubs, service clubs, chambers of commerce, or municipal agencies in community environmental improvement projects.

Home Gardening With Small Fruits

YOU AS A home gardener may have overlooked the possibility of growing small fruits when space is limited. Yet space used to grow strawberries, blackberries, raspberries, blueberries, grapes, currants, and gooseberries pays big dividends in tasty, nutritious fruit, even though the space may be small.

There's a thrill to harvesting juicy, flavorful strawberries and in munching crisp, delicately flavored blueberries right from the plants. And it's a bit of a challenge, requiring some ingenuity, to grow the plants well.

On well grown mature plants the quantities of fruits produced are about as follows: 50 strawberry plants yield 25 pounds; 5 blackberry plants give 25 pounds; 10 raspberry plants yield 20 pounds; 5 blueberry plants yield 25 pounds; 5 grape plants give 50 pounds; 5 currant plants give 10 pounds; and 5 gooseberry plants yield 20 pounds.

Strawberry plants will bear a full

crop a year after planting, but all the other kinds will bear only light crops until the plants are 2 to 3 years old.

Space needed by the various plants differs. Space strawberry plants 1' apart in the row and cut off all runner plants so that only the original plants produce fruit. Blackberries need 4' to 6' spacing in the row. Plant red raspberries 2' apart in the row and purple and black raspberries 4' to 5' apart. Blueberries in time fill the row when spaced 5' apart. Grapes must have 8' to 10' in the row. Currants need 3' in the row and gooseberries 4'.

The rows need to be 6' to 7' apart for all crops except strawberries, where 1' suffices.

Growing the different small fruit crops requires some specialized knowledge. Detailed information on planting, cultivation, fertilizing, pruning, and pest control is available in bulletins published by the Office of Communication, U.S. Department of Agriculture, Washington, D.C. 20250 and by the State agriculture experiment stations. Your County Extension office is another good source of help.

Certain requirements must be met, but generally the same practices used for growing vegetables and landscape plants are satisfactory.

All plants need some pruning each year.

Points to consider first are soils, planting sites, climatic conditions, and what kinds of crops can be grown in a particular area.

Well drained silt loam soils are ideal for all the berry crops, but plants can be grown on clay loams, if well drained, or on sandy loams, if irrigated during dry periods. Blueberry plants require an acid soil with a pH of 4.5 to 5.5, and the plants benefit from a mulch of peat moss, wood shavings or chopped leaves.

Since most home gardeners are restricted in their choice of planting sites, keep two points in mind: 1) The plants will occupy the site for several years so they should be planted along one edge of the garden, and 2) most of the crops require full sun, although late afternoon shade may be tolerated.

If late spring frosts occur, strawberries probably will be flowering and the plants should be covered on cold nights since the blossoms are near the ground where the air is the coldest.

Don't try to grow a crop that isn't adapted to your area. Currants and gooseberries grow well in the northern United States, but are worthless in the South. Some varieties may be banned in certain northern areas where white pines are grown as landscape plants and as timber trees, since currants and gooseberries are an alternate host for white pine blister rust. Check with your State Department of Agriculture.

Raspberry is another crop that grows well in the North but is intolerant of prolonged high summer temperatures and, therefore, usually is not satisfactory in the South. Southland and Dormanred can be grown farther south than any other raspberries.

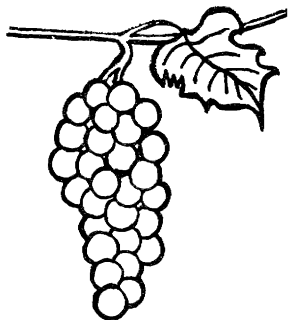


Plant black raspberries only if you are reasonably sure that the purple and red raspberries you are growing are vigorous and healthy. Use essentially virus-free plants whenever possible with raspberries and strawberries.

Two types of cultivated blueberries are grown: The highbush in central and northern areas of the United States, and rabbiteye in the Gulf Coast region and northward to southern Arkansas and southern North Carolina.

Blackberry varieties differ greatly in winter hardiness and in their chilling requirements, so check carefully on the variety before buying plants. Use thornless varieties in the areas where they are recommended.

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Grapes can be grown almost universally, but not the same type in all regions. American bunch grapes, such as Concord, are grown in central and northern regions, muscadines (Scuppernong and Hunt are examples) in the South, and European—such as Thompson Seedless—mostly in California and Arizona. The hardiest European can be grown in protected areas of the Great Lakes and Pacific Northwest, but they are not so reliable as the American bunch grapes.

Strawberries are a universal crop but, for greatest satisfaction and best quality, grow the varieties recommended for your locality.

What varieties should you plant? They are legion. Selection of the proper varieties is one of the most critical decisions that a gardener must make for all the berry crops.

Most varieties have a limited area where they grow best, and they may not be satisfactory at all in another locality. For example, Surecrop strawberry is productive and has good quality in the northeastern States, but is unproductive in the upper north-central region.

Descriptions given in nursery catalogs are for the performance of varieties where they are best adapted, but that may not be your area. So check the recommended list of varieties before ordering plants.

Choose disease-resistant varieties to reduce losses from disease. Some diseases such as red stele root rot of strawberries and cane canker of blueberries can be controlled only by use of disease-resistant varieties.

Consult your local or State agricultural experiment stations or U. S. Department of Agriculture publications for a list of varieties recommended for your conditions. Here are some general recommendations:

Currants—Itasca and Red Lake.

Gooseberries—Pixwell, Poorman, and Oregon Champion.

Highbush blueberries—for the North: Bluecrop, Blueray, Berkeley, Collins, Coville, Darrow, Herbert, and Jersey (plant two or more varieties for cross pollination). For the South: Croatan, Morrow, Murphy, Wolcott.

Rabbiteye blueberries—for the South: Briteblue, Delite, Southland, Tifblue, Woodard (plant two or more varieties for cross pollination).

Blackberries—for the North: Darrow. For the central States: Darrow, Smoothstem, Thornfree. For the South: Brazos, Oklawaha, Boysen, Georgia Thornless. For the West: Aurora, Boysen, Marion, Olallie, Thornless Evergreen, Thornless Logan.

Raspberries—for the North: Chief, Heritage, Fallred, Latham, September, Taylor. For the upper south: Dormanred, Southland. For the West: Canby, Meeker, Puyallup, Willamette.

Grapes—American Bunch for fresh: Buffalo, Concord, Fredonia, Niagara, Steuben; for juice: Aurore, Baco Noir, Catawba, Chelois, Concord, Delaware, De Chaunac, Landot 4511, Seyval Blanc, Cayuga White. Muscadines: Cowart, Dearing, Magoon, Magnolia, Roanoke. European for fresh: Cardinal, Perlette, Thompson Seedless; for juice: Alicante Bouschet, Carignane, Cabernet Sauvignon, Palomino, Petite Sirah, Pinot Noir, Rubired, Ruby Cabernet.

Strawberries—for notheast and north central: Catskill, Gem, Guardian, Holiday, Fletcher, Midway, Raritan, Redchief, Sparkle, Surecrop. For Northern Plains States: Dunlap, Ogallala, Stop-



light, Trumpeter. For south Atlantic and south central: Apollo, Atlas, Albritton, Blakemore, Pocahontas, Sunrise, Tennessee Beauty, Titan. For Gulf Coast and deep south: Dabreak, Florida 90, Headliner, Tioga. For western: Fresno, Hood, Northwest, Sequoia, Shuksan, Tioga, Tufts.

What is so good as strawberries and cream—it could be a blueberry pie made from garden fresh berries! Not only can most of the berry crops be eaten fresh, but they can be converted into most delectable cooked products.

Delicious jams, jellies, juices, wines, pies, preserves, tarts, and muffins made from the fruits start the taste buds salivating just to think of them.

Strawberries, raspberries, blackberries, and blueberries are easily processed by freezing, to be used later in pies, jams, and jellies at the cook's leisure.

Grapes are often used to make wines. Homemade grape wines can range in quality from worse than mediocre to excellent, depending to a considerable extent upon the varieties of grapes used. Again be guided by the recommendations of specialists at your State experiment station.

All home gardeners should grow some, if not all, of the berry crops. The space dividends are high. The taste treats are unexcelled. And the satisfaction from growing bounteous crops is unsurpassable.

FOR FURTHER READING:

U.S. Department of Agriculture. *Growing Blackberries*, F 2160, Office of Communication, Washington, D.C. 20250.

———. *Growing American Bunch Grapes*, F 2123, Office of Communication, Washington, D.C. 20250.

———. *Control of Grape Diseases and Insects in the Eastern United States*, F 1893, Office of Communication, Washington, D.C. 20250.

———. *Controlling Diseases of Raspberries and Blackberries*, F 2208, Office of Communication, Washington, D.C. 20250.

———. *Strawberry Varieties in the United States*, F 1043, for sale by Superintendent of Documents, Washington, D.C. 20402.

Apples, Cherries Pears, Plums and Other Fruit Trees

MANY KINDS of tree fruits can be grown in the backyard of both urban and rural homes. This can be turned into a family project to be enjoyed by all. The growing of fruit trees is relatively easy, but controlling diseases and insects to assure good quality fruit is more difficult. This fact should not discourage the average family from growing their own fruits and enjoying some of the labor involved and the taste of the fruit produced.

Since fruit pests can and should be controlled, the backyard enthusiast should be familiar with control measures, as well as tree management practices, before planting many of these trees.

Apples are the easiest to grow. The trees respond readily to pruning, training, and fertilizer. The only apple trees to grow in the backyard are the dwarf ones. The desired variety should be budded on one of the following rootstocks: Malling 9, M.26 or M.7. When these rootstocks are used, the trees are smaller at maturity and more easily cared for, in addition to fruiting earlier and more regularly than trees on standard rootstocks.

Many favorite apple varieties grafted on dwarfing rootstocks are listed, described, and handled by nurseries dealing with fruit trees.

Here are a few varieties suitable for the home garden which are most likely to be available: 'Delicious' (spur types or strains of 'Delicious' are preferred because they are slightly dwarfing and usually more productive), Yellow (Golden) Delicious, McIntosh (spur type), Jonathan, Spartan, Cortland, Idared, Prima, Macoun, Gravenstein, Jerseymac*, Paulared*, Red Tydeman*,