Grapes May Be Used as Fresh or Stored Table Fruit, Made Into Jellies or Juice, or Fermented Into Wine. There is a Wide Range of Flavors Among the Many Varieties. Grapes Can Be One of the Easiest Home-Garden Fruits to Grow and One of the Most Rewarding.

There are Several Types, Each Suited to Particular Climates, Areas and Use. Trying to Grow Types Not Adapted to Your Area Can Be a Frustrating Experience.

In an Article This Brief, There is No Way to Cover All Varieties or All the Methods of Growing Grapes. Nor Can All the Possible Mistakes, Hazards or Pests Be Discussed. What Follows Are General Statements.

Before Deciding to Try to Grow Grapes, You Should Consider the Basic Requirements for Success:

—A Growing Season of at Least 140 Frost-Free Days.
—A Site with Full Sunshine and Good Air Drainage (Not Frosty).
—Soils That Are Neither Waterlogged Nor Shallow, at Least 3 Feet Deep.
—Willingness to Spray at Least Three Times Per Year to Control Insects and Diseases.
—Patience to Wait Three to Four Years for Vines to Reach Maturity Before Cropping.
—Annual Pruning of Vines.
—Readiness to Defend the Fruit Against Birds by Netting the Vines or Bagging Clusters.

A Few Vines May Be Planted Along an Existing Fence, or a Fence or Arbor May Be Built in an Esthetically Pleasant Place. Vines Form an Excellent Summer Privacy Screen, But After Leaf Fall and Pruning There Is Little Left.

Purchase of Rooted Vines from a Nursery or Garden Store Saves a Year Over Propagating Your Own Vines from Cuttings. If Muscadines or Grafted Vines Are to Be Grown, the Purchase of Plants Is Preferable.


Planting Will Be Easier If the Soil Is Spaded or Tilled Beforehand. Grapevine Roots Rapidly Grow Out Several Feet in the First Two Years, So Working Compost or Fertilizer Into the Planting Hole Will Be of Little Value.

For at Least the First 2 Years, an Area One to Two Feet Around Each Vine Should Be Kept Free of Weeds by Hoeing, or With a Heavy Mulch of Grass Clippings or Black Plastic. Fertilize Young Plants Only on Very Poor Soils.

Varieties

The Choice of Grape Varieties Is Both Important and Complicated. Advice From Neighbors, Your County Extension Office or From State Agricultural Experiment Station Bulletins Can Be Most Helpful.

For California and Parts of the Southwest, There Are Many Excellent Varieties of Old World Grapes (Vitis vinifera). There Are Seedless Table Varieties, Muscats and Many Wine Varieties, Each Best Adapted to Certain Areas.

For the Southeast (From Tidewater Virginia, Through the Central Areas of the Carolinas, South Through Florida, and West Through the Southern Part of Texas) Pierce's Disease Kills or Shortens the Life Expectancy of Many Popular Grape Varieties.
In these areas the kinds of grapes that may be expected to give the best results are the muscadines, like Scuppernong or modern self-fertile varieties, and a few tolerant varieties introduced from the Florida Experiment Station at Leesburg; Stover, and Lake Emerald, and a few older varieties such as Champanel, Herbemont and Lukfata. Other varieties may survive to produce a crop or two, but have not proven successful over a longer period.

For the rest of the country, where the climate is humid enough to permit wild grapes to survive, the problem of variety selection is complicated by the several diseases and insects that attack cultivated grapes. The American and French-American varieties are somewhat tolerant of these problems and therefore less risky to grow.

In the shorter season areas (140 to 160 frost-free days), you can grow early ripening varieties such as Beta (blue) for juice and jelly; Foch (blue), Cascade (blue), and in better sites Aurore (white), for wine. Light cropping of vines may be useful in short-season areas because it can advance ripening of the fruit by about two weeks.

In the medium season areas (160 to 200 frost-free days), Concord (blue) and Niagara (white) are two of the most popular and easily grown varieties for table use and for juice and jelly. There are several semi-seedless varieties, like Himrod (white) and Suffolk Red, table grapes such as Seneca (white), Alden (blue) and Steuben (blue), and many French-American wine grapes that are satisfactory. Chardonnay and White Riesling, representatives of vinifera wine grapes, may survive if sprayed carefully and frequently.

For growing seasons longer than

Top, table variety, Steuben. Right, semi-seedless Suffolk Red.
200 days, late ripening varieties are preferred. Concord and Niagara are suitable for juice or jelly. White wine varieties include Villard blanc and Vidal 256, for red wine-Chambourcin and Villard noir. A muscat flavored grape of interest is Golden Muscat.

If you have a protected site, in cold areas, and if you are willing to take a chance on occasional crop loss and especially if you are willing to take extra effort to protect vines against pests, you may succeed with varieties that might otherwise fail.

Vines should be planted at about the same depth they were grown in the nursery. If vines are grafted, the graft union should be about 2 inches above ground level.

Roots should be spread out in all directions in the planting hole. They may be trimmed to about 2 inches if you choose to plant the vines in a narrow hole made with a post-hole digger.

The top should be cut back to leave two or three buds. When the new shoots begin to grow, remove all except the one or two shoots that are the most vigorous and straight. Tie these loosely to a light stake. Several times during the first season remove lateral shoots that develop at the point of attachment of each leaf. This allows the main shoot to grow more rapidly and a full year may be gained in establishing the vine.

Failure to remove these lateral shoots and the sprouts that appear from the base of the vine throughout the season will result in a bushy vine which seldom has any shoots long enough to reach the trellis.

Leave about four lateral shoots just below any horizontal wires along which you want the vine to grow. When the shoot or shoots reach the highest point of the trellis or arbor, tie them there, pinch off the tip and allow several of the lateral shoots to grow.

If for any reason a vine fails to make good growth during the first growing season, cut the top back to two buds and treat it as a newly planted vine. It will generally grow more vigorously during the second season.

Training places the crop in a convenient location for vineyard operations and harvest. Pruning controls the size of the crop to a level that can be ripened successfully.

Structures

Structures on which the vines may be trained range from two or more posts set in the ground and strung with two or three horizontal wires (a trellis) to decorative arbors. Bracing should be sufficient to carry the weight of vines and crop under the sort of wind conditions experienced in the area. Trellis posts should not be more than 20 feet apart and arbor posts not more than 10 feet apart.

Wires (11- or 12-gauge smooth galvanized) should be spaced about 2 feet apart up the posts or along the top of an arbor. Closer spacing causes excessive shading. To permit weed control under the vine and to keep the fruit up, the lowest wire should be 30 to 36 inches above the ground.

Train a permanent trunk to the top wire of a trellis or to the top edge of an arbor.

During the dormant season when vines are pruned, fruiting canes (see below) should be trained outward along each wire on the trellis or along an arbor’s top edges.

Each bud on the fruiting canes grows into a shoot from 4 to 20 feet long. These are tied along trellis wires as they grow, or on an arbor are spaced out across the top wires to give even exposure to sunlight.

Fruiting canes can be readily identified if we look at a vine in the spring before growth begins. They are the one-year-old shoots (wood of the previous season), with bark that is smooth and brown. At each place
where a leaf grew the previous season, there is a conical swelling, or bud.

During the growing season, each bud grows into a shoot which bears leaves and generally three clusters of grapes. The more buds that are left after pruning, the more clusters will appear on the vine.

An unpruned grape vine will set far more fruit than it can ripen successfully. Fruit from overcropped vines is low in sugar, sour, and has poor color. Excessive over-cropping can severely damage the vine.

Obviously the cluster size must be considered in calculating size of a crop. With very large clustered varieties, such as Thompson Seedless, as few as 10 clusters per vine (8-foot spacing) should be left. Perhaps 50 clusters of Concord can ripen and as many as 100 of small clustered varieties such as Beta or Foch.

The commercial grower controls crop size by leaving exactly the right number of buds. The home gardener can achieve a far more accurate control of crop size, and do it despite variations in weather or fruitset, by leaving an excess number of buds, two or three times as many as needed, and removing clusters until the right number remain. Removal of excess clusters can be done any time from before bloom until mid-season.

**Pest Control**

Most county Extension offices have spray schedules for the home gardener and in those areas where grapes are grown, appropriate sprays for diseases and insects are included. You may be able to get an occasional crop without spraying, but both diseases and insects tend to become progressively more severe from year to year.

Control of weeds for a foot or two around young vines is worth the effort in the improvement of growth you can expect. Once established, the vine will shade out some weed growth.

Some types of weedkiller should not be used near grapes as they are extremely sensitive. Do not use the combination of fertilizer plus weedkiller on lawn areas within 15 feet of a grape vine. The weedkiller may be picked up by the grape roots that extend out this far and the vine can be damaged.

In many areas birds can be a major problem. Netting, which can be used earlier in the season for strawberries and blueberries, is available and if placed carefully over the vines will protect the fruit.

Hornets and wasps on ripe fruit are a common complaint. They are able to attack the fruit only if it has been damaged by insects, diseases or birds, or if it is overripe.

An acceptable taste is the main criterion for table use. On a vine that is not overcropped, the berries of blue varieties will lose their red color and white varieties will change from green to golden yellow. Ripe berries will soften and seeds become brown.

Black rot fungus on an American bunch grape leaf.