

# SMALL FRUITS...

FOR THE  
HOME  
GARDEN



CIRCULAR 432

# SMALL FRUITS FOR THE HOME GARDEN

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It is possible, in most sections of Oklahoma, to secure a large part of the family's fruit requirement from the home garden. Producing small fruit can be an interesting hobby and a profitable undertaking. There is no substitute for the quality of vine-ripened fruits produced in our own gardens. The satisfaction in consuming fresh or processed home grown fruits is ample reward for the time and effort required.

Small fruits, such as strawberries, blackberries, dewberries, and grapes, are well adapted to production in the family garden. They should be located over to one side in the perennial section of the garden. If strawberries are to be grown in the western part of the state, a windbreak should be provided along with facilities for irrigation, if needed.

The plants are inexpensive and only a short time is required until they come into production. Plan the planting carefully. Select the small fruits best adapted for your area. Select the best varieties. Secure good, healthy, strong plants. If the space permits, be sure to include one of the bramble fruits.

Less time and effort is usually required to control insects and diseases of small fruits than that required for tree fruit. A good job of cultivating, pruning, and winter protection are essential to profitable small fruit production.

## General Care

### What to Plant

Grow the kinds of fruit that the family likes. A few plants well cared for will produce more than a large, neglected planting. On the average you can expect to harvest sufficient fruit for one person from a combination of any *two* of the following: Fifty strawberry plants, twelve blackberry or Austin dewberry plants, six Boysen or Young dewberry plants, or four grape vines. To figure the number of plants needed, select two kinds of fruit and multiply the number suggested by the number of persons in the family.

In good fruit years when a surplus is produced, local demand usually can be found for good quality fruit.

### When to Plant

Fall planting is generally the best for strawberries, grapes and one-year-old dewberry plants. Tip rooted dewberries should be planted in the spring. Any of the small fruits may be spring planted. This is especially true in the drier sections of the state.

## Soil Preparation

Prepare land to be set to small fruits in early fall. Plow it deep, turning under an application of barnyard manure if possible. Work the soil into a firm seedbed by disking and harrowing before planting. If the home garden is not large enough to include the fruit planting, enlarge it during the winter. It is always advisable to protect fruit plants with a good fence.

## Suggested Varieties

The following varieties are approved by Division of Agriculture, Oklahoma State University:

Kind of Fruit	Eastern Area	Western Area
Blackberries	Early Wonder — Lawton	Lawton
Dewberries	Austin (Mayes) Boysen — Young	Austin (Mayes) Lucretia — Young
Strawberries (everbearing)	Blakemore, Poca- hontas Superfection 20th Century	Blakemore Superfection 20th Century
Grapes (B. Black) (W. White) (R. Red) (T. Table) (J. Juice)	(B) Cimarron (T) (J) (B) Fredonia (T) (J) (B) Wayne (T) (W) S-9100 (T) (B) S-V-18-315 (J) (R) Delaware (T) (B) Bailey (T) (J) (B) Extra (J) (R) Catawba (T)	(B) Cimarron (T) (J) (B) Wayne (T) (W) S-9110 (T) (B) S-V-18-315 (J) (B) Beacon (T) (J) (B) Extra (J) (W) S-V-12-375 (J) (B) Carman (J) (B) Bailey (T) (J) (B) Muench (J) (R) Catawba (T)

Varieties are listed in the order of their season.

## Spacing and Planting

Do not set fruit plants too close together. Provide ample room for normal development. Space rows so that they can be cultivated with the tools at hand. The following spacings are recommended: Grapes, eight to twelve feet apart, plants ten feet apart in the row; Boysen and Young dewberries, eight to twelve feet apart, plants six to eight feet apart in the row; Austin dewberries and blackberries, rows six to eight feet apart, plants three to four feet apart in the row;

strawberries, rows three to four feet apart, plants 18 inches apart in the row. The blackberries, Austin dewberries, and strawberries, will make a solid row of plants.

In planting do not allow the roots to dry out, and firm the soil well around them. If the soil is dry, water the plants. Care must be exercised in setting strawberry plants to get the crown level with the top of the ground. This is not difficult if a firm seedbed has been prepared ahead of planting. If the crown is covered with soil it will rot; if too shallow it will dry out. Set other small fruit plants at the same depth they stood in the nursery and *cut off all of the tops except a short stem with one or two buds.*

### **Cultivation and Care**

Since small fruit plants bear their crop from growth made the previous season, cultivate to encourage adequate plant growth during the summer. Cultivation should be shallow, just deep enough to destroy the weeds and sucker plants. To get a matted row of strawberries, keep the soil loose around the mother plants early in the season and avoid pulling out runner plants when cultivating. Most of the small fruit failures are due to poor care during the summer months.

### **Insect and Disease Control**

Small fruit, on the average, requires a small amount of protection against insects and disease pests. Good cultural practices, however, including the practice of clean cultivation and the burning of prunings, will add to the life of the planting. Anthracnose, a fungus disease, is the most serious disease problem of bramble fruits. It causes whitish spots to appear on the leaves and vines, gradually reducing the vital functions of the plant. Effective control can usually be had by practicing orchard sanitation. (1) Remove and burn all old plants soon after harvest. (2) Use a delayed dormant spray in the spring when buds begin to grow ( $\frac{1}{2}$  inch), using liquid lime sulphur at the rate of one gallon to ten gallons of water. (3) In severe cases another spray may be used just before the blossoms open using a 1 to 40 liquid lime sulphur or Bordeaux mixture, 2-3-50, or fermete. A thorough job of spraying is important.

When control measures must be resorted to for the production of clean fruit, follow a good recommended spray schedule. Grapes will require a spray program.

## **POINTERS ON SPECIAL CROPS**

### **Strawberries**

A new planting should be cultivated or mulched during the summer and irrigated, where possible, if dry weather prevails. After a hard frost, usually by early December, the strawberry rows should

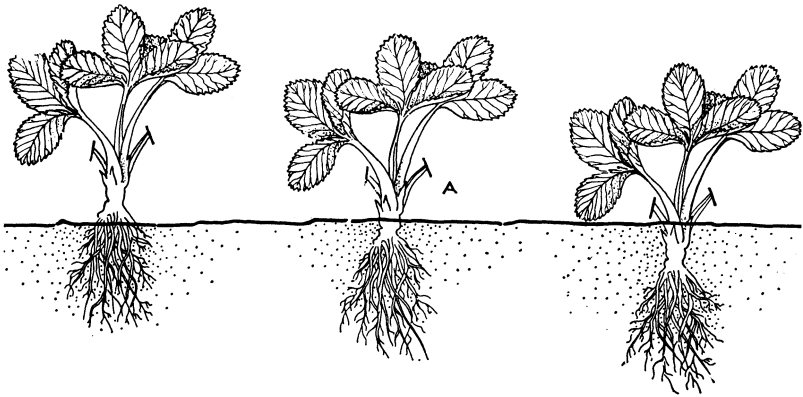


Figure 1. Strawberries should be planted at the proper depth.

be mulched with about three inches of old straw, hay, or one to two inches of cotton burrs. Dried lawn clippings and dry grass may be mixed with leaves to form the mulching material. Tree leaves alone will tend to settle flat and smother out the plants. Finer material should be mixed with some coarse plant material to form the mulch. The volunteer grain in new straw becomes quite a problem and should not be used for mulching material. The mulches protect the plants from cold and keep the berries clean during the spring harvest. It may be advisable to remove part of the mulching material from directly over the rows in the early spring in order that the plants can come through. The mulching material can be worked into the soil immediately after harvest. If there is too much material to work into the soil it can be raked off and stacked at the end of the row—to be used for some other purpose. Do not burn excess mulching materials in the strawberry patch.

Immediately after harvest about one-half of the old plants that have produced their crop should be removed. This can be done by thinning the old plants with a hoe to a row of plants about eight inches apart. If a plow is used, bar off one side of the row and then throw the furrow back. With the hoe, thin out the row by removing the excess plants. It is important that the new runner plants have room to develop. Summer cultivation is very important.

### Blackberry and Dewberry Types

The blackberry plant can be made to grow bush-like, with side branches, by cutting the top off when the cane reaches a height of about 30 inches.

This system of pruning causes the plants to be confined to the row and cultivation is much easier. In the early spring, before growth starts, cut back the side branches to about two-thirds of their length. In older plantings it may be necessary to thin out the weaker canes,

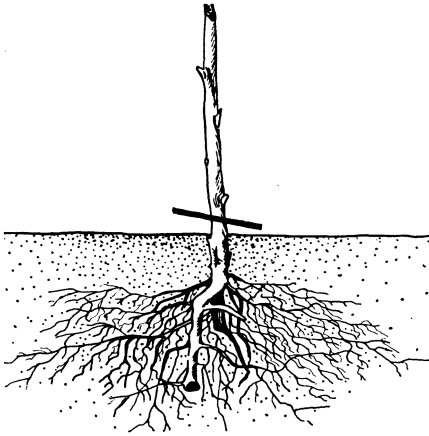


Figure 2. A strong, well-rooted blackberry plant showing the proper depth of planting. Top removed at the ground line to prevent the spread of anthracnose disease to the new location.

leaving not more than three or four canes per foot of row. This system of pruning improves the quality of the berries, as well as the yield, and makes the job of picking much easier.

Austin Dewberries will require little or no pruning back of canes, but will require thinning in the row and cultivating near the row to remove the tip-rooted plants. Three or four inches of mulching material worked under the vines near the row during the winter time will enable one to pick cleaner berries in the spring.

Boysen and Young berries produce long canes or runners. When the canes are about a foot long, turn them lengthwise of the row in order to be able to continue summer cultivation and to make it easier to pick up the vines for trellising in the spring. They must be left on the ground during the winter to avoid winter killing.

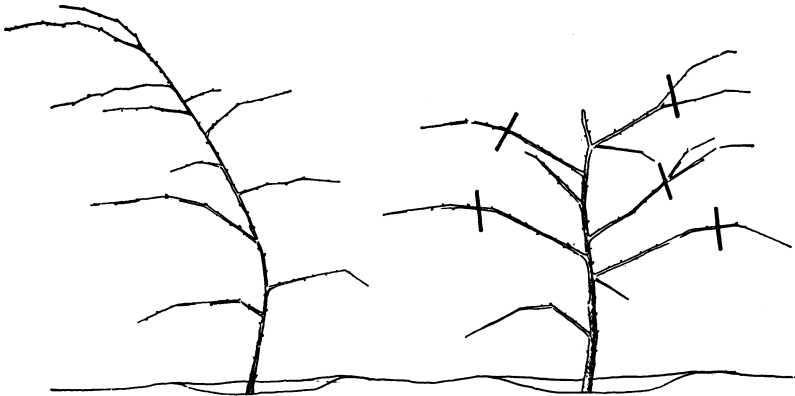


Figure 3. Pruning makes the difference. Note the sturdy plant on the right. This blackberry plant was pruned during the summer, and the following spring before growth starts it will be pruned where the black marks indicate.

It is desirable to stop cultivating early in August and to let weeds and grass grow up around these canes to provide some winter protection. The plants may be mulched and the canes left on the ground as in the case of Austin dewberries. If the plants are not mulched it is advisable to tie the canes up on stakes or a wire trellis in the spring. However, do not tie them up until after the danger of frost even though buds may start to open and some damage may be done in handling. Late spring frosts will kill the crop if the canes are tied up when frost occurs. A five-foot stake or post at each plant makes a good support, or a two-wire trellis for both grapes and Boysen and Young dewberries may be used. Tie the canes to their supports with heavy twine or pieces of cloth.

Since blackberries and dewberries bear fruit on canes that grew the previous season, the old canes are useless after the berries are harvested and should be removed and burned. New canes will already be growing for next year's crop by this time. In the eastern one-third of the state, usually it is safe to remove both old and new canes if insect or disease problems are severe, because moisture is plentiful enough to grow another crop of canes for next year's berries. In western sections, the new canes should be left and the old ones removed by cutting them off at the ground and pulling them out. A long handled hook or pair of long handled pruning shears is best for this job and a pitchfork can be used to lift out old canes and for piling and burning.

### Grapes

As soon as the grape plants have been set out cultivation should start. Clean cultivation throughout the summer is necessary if one expects to grow strong, vigorous plants necessary for good grape production.

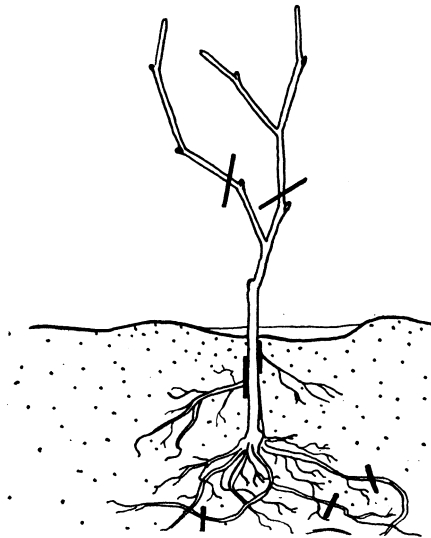


Figure 4. A newly planted grape plant showing the proper depth of planting and the pruning of the broken roots and the top pruned back to two buds.

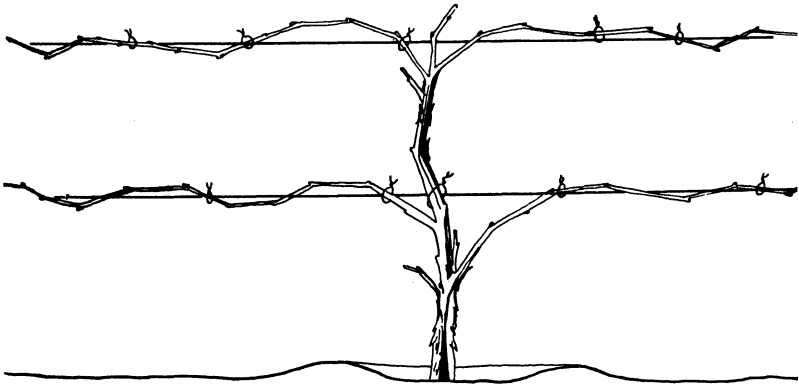


Figure 5. Properly pruned, mature grape vine for the two wire system.

During the first growing season the trellis should be built. The best type of trellis is two wires, stretched on posts set between every other plant. Use special care in bracing the end posts so the wires can be kept tight. Smooth wire is preferable although barbed wire can be used if smooth wire cannot be obtained. Stretch the lower wire 36 inches from the ground and the top one 24 inches above it or 60 inches above the ground. The trellis for Boysen and Young dewberries should be about 6 inches lower.

When the new plants have grown canes a foot or so in length start training the vines on the trellis. The best method to follow in doing this job is to use strong twine, tying it to an old spur or side branch near the base of the plant and stretching it tight to both wires, taking a turn around the lower one and tying to the upper. Select the strongest cane and stretch it upright by winding and tying it loosely around the string. Remove all other canes from the base of the plant. When the central cane reaches a point five or six inches below the top wire pinch it back. This will cause it to develop lateral branches on which to bear fruit the next summer. Full bearing will not be attained, however, until plants reach three years of age and are producing an abundance of cane growth each year.

*To keep grape vines producing, a severe annual pruning after the second year of growth is an absolute necessity.* Prune lightly the first winter, cutting back the side branches of the central cane to leave thirty or forty buds per plant on four healthy pencil-sized canes. Each winter thereafter remove all old wood not needed to support the selected fruiting canes. February is a good pruning month. Leave about fifty fruit buds per plant.

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