ALABAMA A&M AND AUBURN UNIVERSITIES

Fruit Culture in Alabama

Training and Pruning Small Fruits

ANR-53-L

Bush and vine types of deciduous small fruit plants require some initial training to develop desirable forms. Annual pruning in varying degrees is also necessary to keep plants in allotted space and stimulate optimum performance.

Training Small Fruits

Early training procedures are required for certain of the small fruits, but these methods are not nearly as intensive as for tree fruits. Grapes require the most intensive training program.

Training Grapes

Bunch and muscadine grapes require special training on trellis systems. A single-wire trellis is the simplest method to use and is especially recommended for home gardeners. A two-wire horizontal trellis such as the Geneva Double Curtain (Figure 1) is used by some commercial growers. The two-wire trellis increases yields by 30 to 35 percent, but it also increases disease problems.

Training during the first season mainly involves selecting a single new shoot to grow upward to the trellis wire. Support the shoot with twine or bamboo. Allow it to grow several inches beyond the trellis wire, and then cut 4 to 6 inches below it. Select one shoot growing each direction along the wire, and remove all others. In only one or two seasons, cordons (arms) will be fully developed on the trellis wire.

Training Erect Blackberries

If you plant bare root or containerized blackberries rather than root cuttings, reduce the height of the plants by about one-third. Early training of erect blackberries largely involves removing leaning canes or removing branches of more upright canes. Trellises may be used but are not necessary. Pruning these shoots, which ultimately touch the soil if left uncut, forces more growth into the upward, more desirable canes. If the upright canes in the center of the row begin leaning, top them at a height of 18 to 24 inches, and allow them to regrow upward. If you follow this practice, the majority of the fruit will be produced on canes that keep the fruit off the ground the first harvest season. If you do not prune the first year, at least half of the fruit developed in the second season will be in contact with the soil. Although called “erect,” this type blackberry produces leaning canes the first fruiting year, and pruning simply helps direct the production of desirable fruiting wood. Canes produced after the first year are very erect.

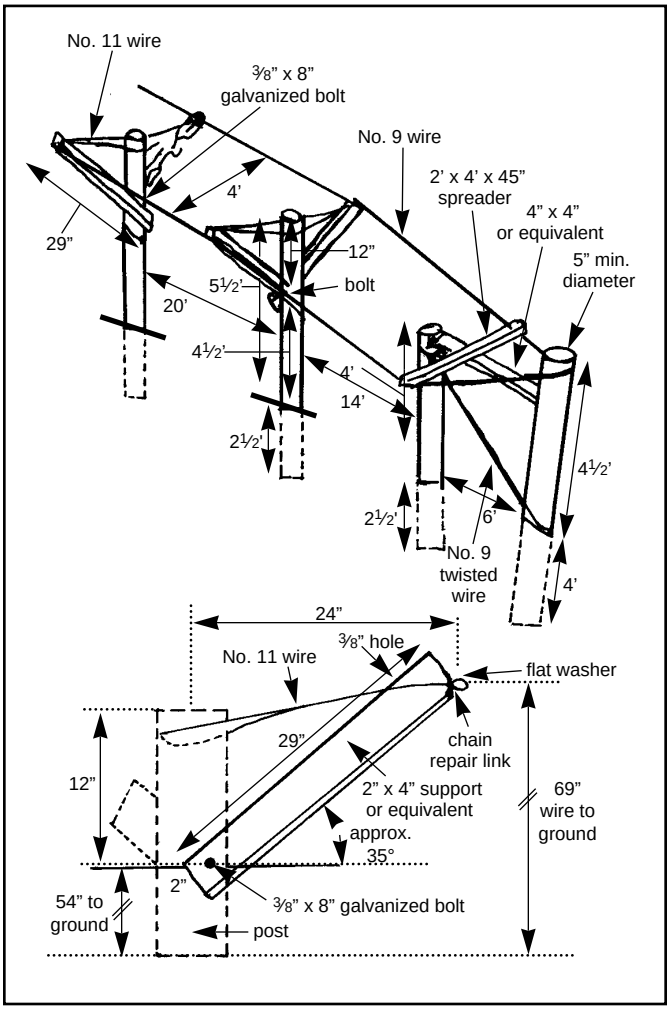

Figure 1. Support system for the Geneva Double Curtain trellis, showing construction details

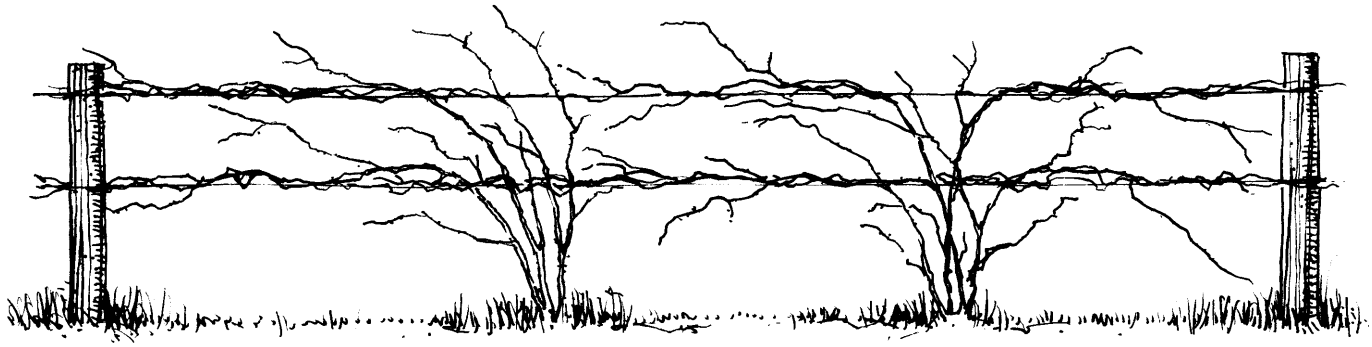

Figure 2. Trellises for blackberries and raspberries. Train trailing plants to a two-wire trellis. Source: Farmers Bulletin No. 2160, 1979.

Training Trailing Blackberries and Raspberries

Trellises must be used for trailing blackberries and raspberries. Both one- and two-wire trellis systems work well (Figure 2).

Training Blueberries

Early training of blueberries mainly involves proper pruning at planting time or in early spring. If you plant bare root or container blueberries, reduce the height of the plant by about one-third to ensure good transplant recovery and initial growth. Remove branches growing closer than 12 inches to the ground to facilitate chemical weed control where needed. Pinch strong, vigorous, unbranched shoots after they grow 24 to 30 inches to induce branching.

Pruning Small Fruits

Pruning small fruits stimulates growth and limits height and spread of the plant. Grapes and blackberries (trailing and upright) produce their fruits on current spring growth developing only from 1-year-old wood. Thus, they should be pruned to create an abundance of healthy 1-year-old shoots. Grapes and blackberries should be pruned during February and March, although they can be pruned during the winter months.

Pruning American Bunch Grapes

- Remove dead and diseased wood.
- Remove last year's fruiting arms (Figure 3).

Leave one vigorous fruiting arm of current season growth to replace each arm removed. Also leave on e renewal spur for each fruiting arm by selecting a current-season cane and cutting it to a two- to three-bud stub. The renewal spurs will produce the fruiting arms to be used the following season.

- Remove all other canes arising from the trunk.
- On vigorous, growing vines leave 12 to 15

buds on each cane (also called arm or cordon) selected for fruiting during the coming season. On weak vines, leave only 8 to 10 buds per cane.

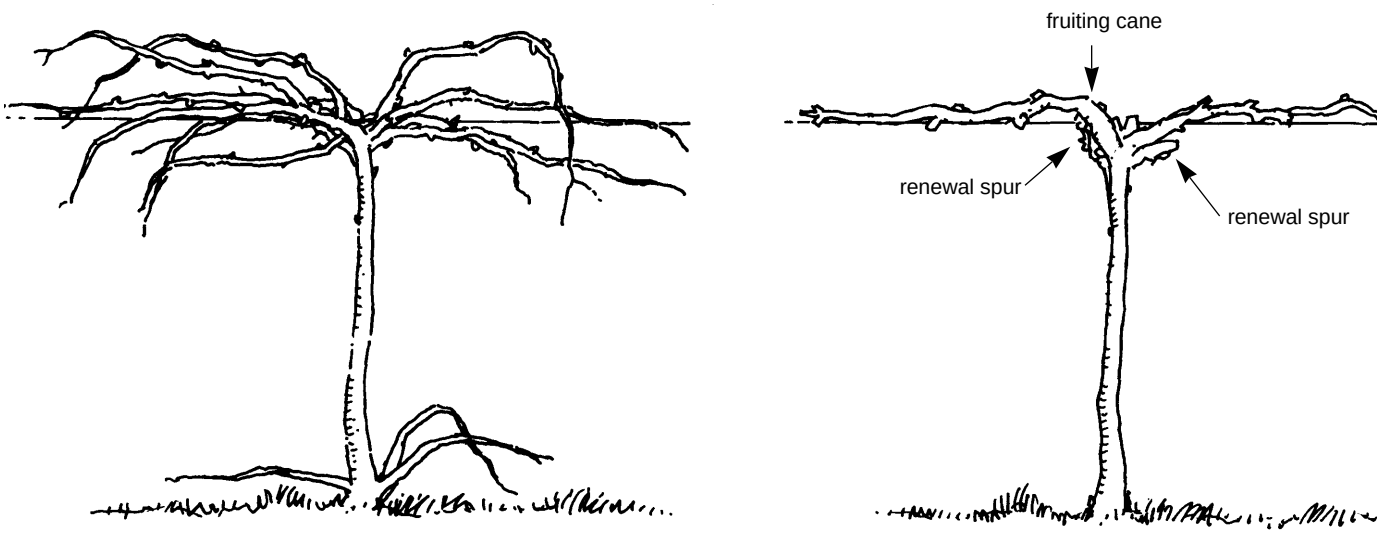

Figure 3. Bunch grapes, showing a mature dormant vine before pruning (left) and after pruning (right). This is a two-cane renewal system.

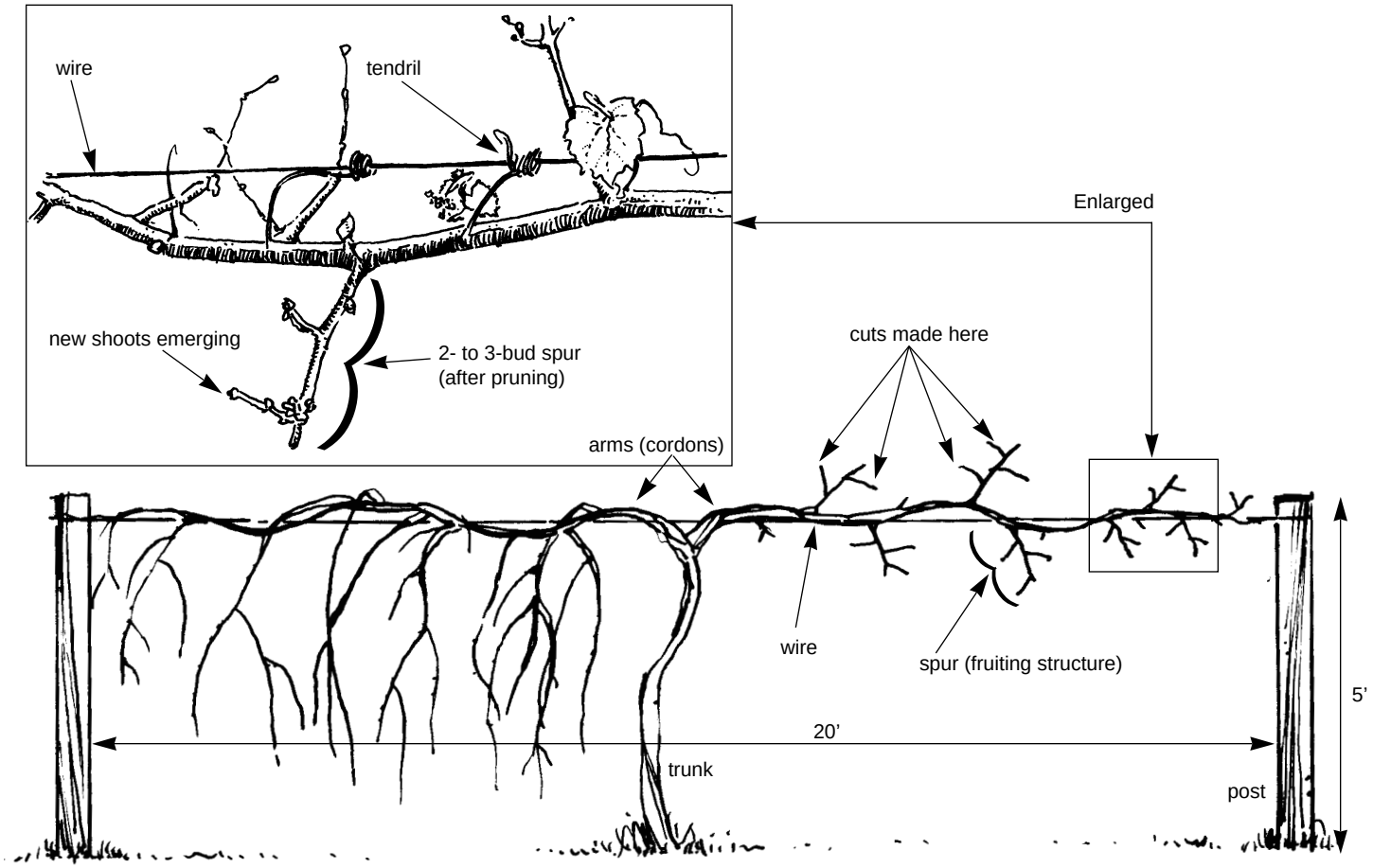

Figure 4. Two cane kniffin system: a method of training muscadines and bunch grapes. (Left arm before pruning; right arm after late winter pruning)

• Tie each cane securely to the trellis wires. Do not worry about girdling these canes; they will be renewed when plants are pruned again.

Pruning Muscadine Grapes

• Thin out dead, diseased, and interfering wood.

• Remove all canes from the trunk except the permanent arms or those canes needed to replace damaged or dead arms (Figure 4).

• Cut back all of the previous year's growth, which is light brown, to two to four buds.

Pruning Erect Blackberries

Blackberry canes are biennial while crowns are perennial and live for 10 or more years. Canes grow vegetatively the first year (primacane), fruit the second year (floricane), and then die shortly after harvest.

• Immediately before harvest, prune new canes to a height of 30 to 36 inches to insure good lateral branch development. Topping the new canes too early results in lush branching, which makes the crop being harvested hard to see.

• Remove all old fruiting canes immediately after harvest. Because removing old fruiting canes is time consuming and expensive, most commercial producers leave the old canes in place until the plants are mowed to the ground every second or third season. To offset lower production the year after pruning, commercial growers plant more acres of blackberries.

• If you want a nicely shaped fruiting hedge, side prune new canes once or twice during mid- to late summer after harvest. Prune laterals to a 12- to 18-inch length so that the hedge width is 24 to 36 inches in late winter or early spring before shoots emerge.

Pruning Trailing Blackberries and Raspberries

Trailing blackberries and raspberries have biennial canes just like erect blackberries. Remove these canes after harvest.

• With small plantings, you have to remove only the old fruiting canes after harvest, but you can reduce leaf spots and other diseases especially for trailing blackberries by removing all canes to the ground and burning them.

• In the case of larger plantings where disease problems have become severe, remove all canes after harvest.

• On thornless blackberry varieties, leave about 1 inch of new canes above the roots. If you cut back to the roots, the new canes arising from the roots of some varieties may be thorny.

Pruning Blueberries

• Cut out diseased, weak, and damaged wood before growth begins in the spring.

• Thin out remaining wood as needed, especially branches lower than 15 inches.

• Keep plants down to a height of 5 to 7 feet to allow for easier harvesting.

• Perform corrective pruning after harvest.

• Starting with the fifth season, begin removing one-fourth to one-third of old canes annually in the case of highbush varieties.

• A standardized pruning program for rabbiteye varieties has not yet been developed. However, when plants are 5 to 7 years old, remove one or more old canes and replace them with new canes annually. After rabbiteye plants are about 6 years old, prune them every 1 to 3 years to reduce height as necessary for hand or mechanical harvest. On large acreages, use mechanical hedgers or pruners.

• To renovate the planting, prune plants to a height of 3 to 4 feet after harvest. For optimum renovation of plantings 10 years old and older, prune plants to a height of 2 feet after harvest. This type of renovation is only needed every several years. If you want to maintain a height of 5 to 7 feet, you may need to prune some every year.

Arlie Powell, *Extension Horticulturist,* Professor, **David Himelrick,** *Extension Horticulturist,* Professor, **William Dozier,** Professor, and **David Williams,** *Extension Horticulturist,* Associate Professor, all in Horticulture at Auburn University

For more information, call your county Extension office. Look in your telephone directory under your county's name to find the number.

ALABAMA COOPERATIVE Extension SYSTEM

ANR-53-L

Issued in furtherance of Cooperative Extension work in agriculture and home economics, Acts of May 8 and June 30, 1914, and other related acts, in cooperation with the U.S. Department of Agriculture. The Alabama Cooperative Extension System (Alabama A&M University and Auburn University) offers educational programs, materials, and equal opportunity employment to all people without regard to race, color, national origin, religion, sex, age, veteran status, or disability.

UPS, 14.1M06, **New June 1999,** ANR-53-L