

Pruning and Training Hardy Varieties

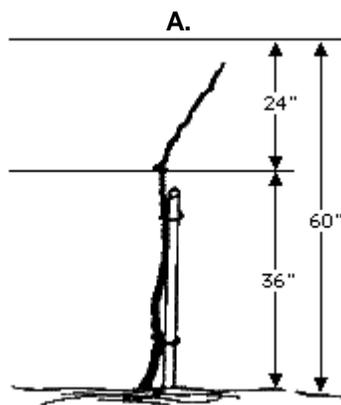
Although there are several systems for training grapes, the four-arm Kniffen system (Figure 1) is the most simple for varieties that do not require winter protection. In this system, two horizontal wires are stretched between posts to support the vine. The bottom wire is 36 inches and the top wire is 60 inches above the ground. The young vine is tied to a stake and, as it grows, to the two wires. This ensures a straight trunk for the mature vine.

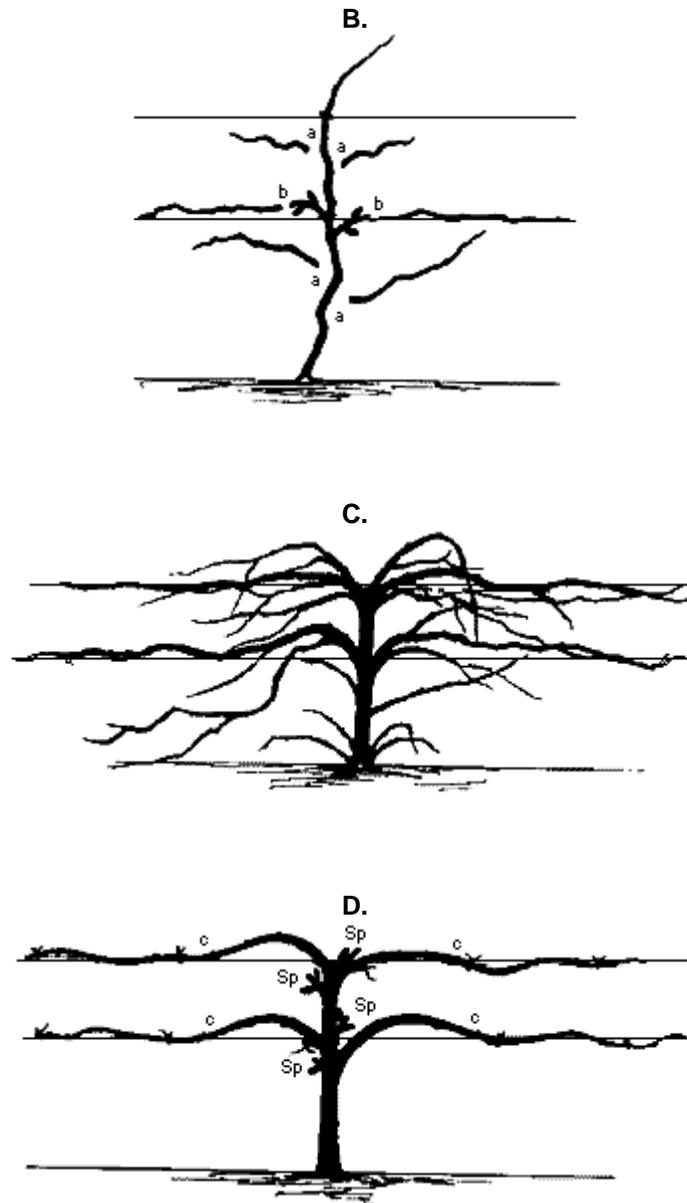
Begin training after the vine reaches the first wire. Remove all shoots between the wires and cut back shoots along the lower wire to two buds (Figure 1B).

The mature vine has four to six canes (each with five to twelve buds) and four to six renewal spurs (each with two buds).

When pruning, keep in mind that fruit is produced on the current season's growth that in turn grows from last season's wood. Heavy pruning provides the best fruit. Light pruning result in large yields of poor-quality fruit; very heavy pruning produces too much vegetative growth and very little or no fruit. Table, juice, and jelly varieties can have 40 to 60 buds per vine, but wine varieties should have only 20 to 30 buds per vine after pruning.

Figure 1. The four-arm Kniffen system. A. The vine is tied first to a stake and later, as it grows, to the wires. B. Branches should be removed (a) or cut back to two buds (b) along the lower wire. C. A mature vine before pruning. D. The same mature vine after pruning. Sp = renewal spur; c = one year old fruiting cane. Fruit clusters will form on shoots emerging from buds on these canes.

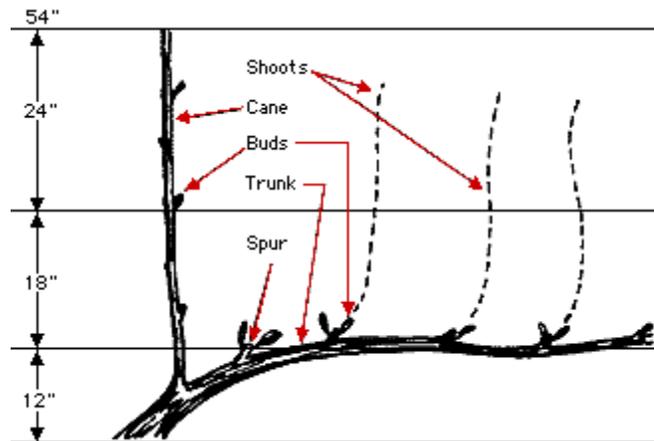




Pruning and Training Tender Varieties

In varieties that require winter protection, prune the vine to a single horizontal trunk that can be removed from the trellis (Figure 2).

Figure 2. Training system for tender varieties.



To over-winter the plant, bend the trunk down and cover it with six to eight inches of soil or mulch. Uncover approximately mid-April, or as soon as frost is out of the ground. Then lift the vine and tie it in place on the trellis. As shoots grow from the trunk, tie them in an upright position to the upper wires. In the fall, when these shoots have matured into canes, cut them back to short spurs containing one or two buds each.

You can increase the trunk's length by bending down the cane farthest from the base of the plant. In this manner, one to two feet of new trunk is added each year until the trunk reaches the desired length of six to seven feet.

Pruning Neglected Vines

Prune old and neglected vines in stages. Select a sturdy cane originating near the base of the plant. Cut it back to three to four feet. After this cane completes its second growing season, cut off the old trunk just beyond the attachment of the renewal cane. Old, neglected, or improperly pruned vines usually have too much wood. When pruning, cut as much of the old wood as possible. This encourages the growth of new wood near the main body of the vine.

Harvesting