WALNUT NOTES

Corrective Pruning

Young black walnut trees may fork or produce multiple leaders when their terminal shoots are damaged by frost, insects, animals, or humans. Because a walnut tree must develop a single, straight stem for valuable lumber or veneer, corrective pruning is often needed to remove lateral branches that compete with the terminal for dominance. But pruning can also cause a tree to grow more slowly by removing part of its food manufacturing plant, the crown.

Is Pruning Needed?

Before you begin to prune, decide if it is really needed. Sometimes a delay in pruning may eliminate the need for it. About one-third to one-half of the trees that develop form problems will correct themselves within a year or two if they are growing well. Or, if your trees are spaced closely enough, a problem tree might have to be removed anyway in an early thinning. Corrective pruning is most likely to be needed in wide-spaced plantings (spacing of 20 feet x 20 feet or greater), because most of the trees planted will be harvested for sawtimber or veneer.

How to Prune

If you decide to prune, remember that the objective is to produce trees with single, straight stems while minimizing the amount of leaf area removed so that the vigor of the tree is not reduced.

Corrective pruning should normally be considered during the first several years after planting, until the desired log length-generally 9 or 17 feet-has been reached.

If two or more leaders are competing for dominance, remove or cut back all but one so that the selected leader can develop into the main stem. The selected leader need not be perfectly straight and upright at the time of pruning. Removing the competing leaders will allow the selected one to straighten and grow upright after one or more growing seasons.

Coppicing

For trees that appear to be hopelessly deformed, you can use a severe form of corrective pruning called *copping.* In coppicing, the tree is cut completely off near the ground. If trees are grafted seedlings, be sure to cut high enough above the graft union so that new sprouts will be produced from the grafted stem and not from the root stock. Coppicing should be done in the late dormant season or very early spring. Normally several sprouts will grow up from the stump. Identify the best of these by late June or early July of the same year, and then cut off the other sprouts.

High Coppicing

A variation of coppicing, called high coppicing, has also been used for young walnut trees. If a tree has 1 to several feet of straight stem below the hopeless deformity, cut off the tree just below the deformed section, if the diameter of the stem at that point is 2 inches or less. One or more sprouts should develop near the point of cutting. Return to the tree in late June or July to cut off all but the one best sprout.

In pruning, it's not possible to prescribe a standard treatment; each tree must be treated individually. But keep in mind that the least amount of pruning necessary to correct the form problem will produce the best results.

References

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Bey, C. F. 1976. How to "train" black walnut seedlings. St. Paul, MN: U.S. Department of Agriculture, Forest Service, North Central Forest Experiment Station. 4 p.

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