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Care of Wind-Damaged Filbert Trees

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Filbert trees which were blown over and have been erected will require special care for several years. Since some roots have been broken and the remaining roots must supply all the moisture for the tree, the potential leaf area should be reduced by pruning. The amount of pruning should be in proportion to the amount of root damage to each tree. In most instances pruning scaffold limbs to within 6 to 8 feet of the main trunk will suffice.

Even with this much pruning, trees may require support. Various systems of bracing, staking, or guy wiring are in use. These devices for support will require periodic inspection to determine whether they are functioning and whether they are damaging the tree in any way.

Since filbert wood is exceptionally susceptible to rots, protection with a fungicidal wound paint is necessary. All cuts more than an inch in diameter should be painted as soon as they have dried out. With large cuts, additional treatments in later years will be required.

The following formula gives an inexpensive wound paint which is durable and an excellent fungicide:

20 lbs. venetian red
3 lbs. neutral copper (for fungicidal action)
(tri-basic copper sulfate)
1 gal. raw linseed oil

These amounts are approximate and a little more oil may be required. This mixture should make a thick paint which will thin somewhat if allowed to stand overnight. It should be applied with a stiff bristle brush and worked well onto the cut.

Powdered Bordeaux mixture mixed with raw linseed oil makes another excellent wound paint. The usual mixture contains 1 pint of raw linseed oil stirred into 1 pound of powdered copper sulfate or 1 pound of Bordeaux powder. The paint should be stored in a nonmetallic container.

Since cultivation, particularly heavy discing, is likely to injure new root growth, it would be best to suppress weed growth by other means. A mulch of sawdust, straw, or other suitable matter covering an area about 3 to 5 feet from the tree would suppress growth of weeds. It would also increase soil moisture levels near the surface and improve soil tilth; both would hasten root development. Mulches reduce summer soil temperatures, thus maintaining the beneficial activity of soil microorganisms. These microorganisms change nitrogen into a form which the plant can readily use. A mulch would also give some protection against freezing. Sawdust mulches should be at least 3 to 4 inches thick and straw mulches should be a foot thick for effective weed suppression.

Mulches, particularly when straw is used, may harbor mice which may eat the bark. If mice appear, they may be controlled with Endrin sprays or poison grain baits. The best time of application is in the fall after harvest. Call your county agent for specific recommendations.

A mulch would not seriously interfere with nut harvesting, because there will be fewer nuts from the wind-blown trees for at least a year. After the first growing season following tree erection, the mulch may be incorporated into the soil. At this time it would be well to apply a nitrogen fertilizer at $\frac{1}{2}$ to $\frac{3}{4}$ pound actual nitrogen per tree.

Growers may wish to use a petroleum oil rather than mulch or cultivate close to the trees. It has been ruled under Public Law 83-518, also known as the Miller Bill, that petroleum oils may be sprayed on weeds in cropland as long as good agricultural practices are followed. Weed oils may be used straight or, if agitation is available, as water emulsions. Used crankcase oil has been employed occasionally in weed control, but it is difficult to handle. There are no herbicides listed as having clearance for use in filbert orchards; therefore, no further recommendations or suggestions can be made at this time.

Fertilization in the first year following the storm would be inadvisable, both because of the possibility of burning the roots and the fact that fertilization tends to favor top growth more than root growth.

Aphids will find the young succulent shoots coming

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from wind-damaged filbert trees particularly attractive. If not controlled, their feeding will cause the shoots to be stunted and twisted. The best time to apply aphid controls is in early spring just after aphid eggs have hatched.

Shot-hole borers often become a problem with weakened trees. Their presence is indicated by numerous small holes in the limbs and trunk.

It is not expected, fortunately, that filbert blight will be more severe on wind-damaged trees.

Probably some of the erected trees will not survive even with the best care. Some others will "hang on" without really being productive. Obviously, it would be best to remove the trees which have not made enough recovery and re-establish them either by growing suckers or replanting.