

Pest Update (February 18, 2009)

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Available on the net at:

<http://www.state.sd.us/doa/Forestry/educational-information/Pest-Alert-Archives.htm>.

Any treatment recommendations, including those identifying specific pesticides, are for the convenience of the reader. Pesticides mentioned in this publication are generally those that are most commonly available to the public in South Dakota and the inclusion of a product shall not be taken as an endorsement or the exclusion a criticism regarding effectiveness. Please read and follow all label instructions and the label is the final authority for a product's use on a particular pest or plant. Products requiring a commercial pesticide license are occasionally mentioned if there are limited options available. These products will be identified as such but it is the reader's responsibility to determine if they can legally apply any product identified in this publication.

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E-sample



Now is the time to check that small fruit tree in your yard for tent caterpillar egg masses. Small crabapples, plums and cherries are often defoliated by these insects in late spring. But a little time spent now pruning away egg masses can avoid the need to spray later. The adults laid the eggs late last summer and these can be easily seen on the small twigs. Look for small, about ¼-inch long, masses of eggs around the small twigs near the tips of branches. The egg masses often appear as molten glass completely encircling the twigs. The twig holding the egg masses should be pruned off and the egg

masses destroyed. This can be done by burning the egg masses or crushing them. Do not just throw the twigs on the ground, the larvae may still hatch and crawl back up the tree this spring. It is important to distinguish between new egg masses, those with viable eggs, and the older egg masses. The older egg masses, those that hatched years ago, will appear gray and have many small holes in them. These can be left on the tree.



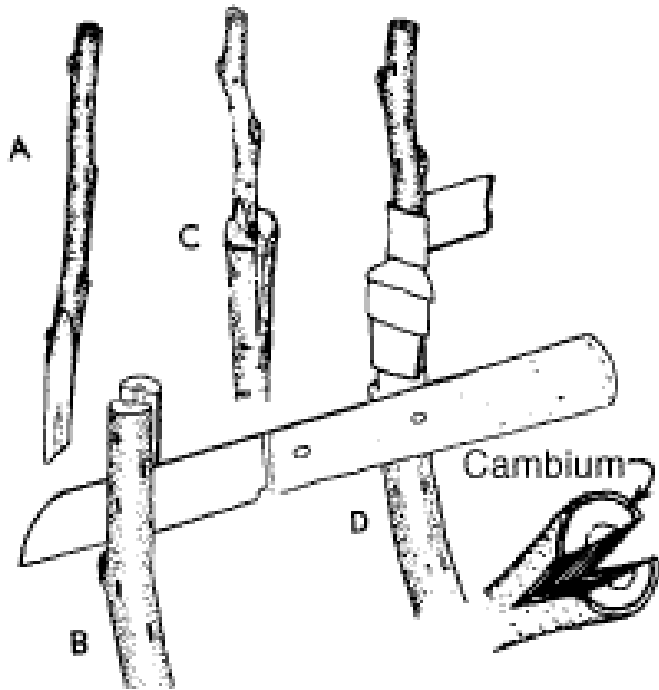
Information request

I had a request for information on how to graft apple trees. Someone has an older apple tree that is beginning to decline. The apples on this tree are delicious but no one knows the cultivar and it may even be one that is no longer being propagated and sold. They want to know how to graft branches from this tree onto smaller apple trees.

This is a fairly common request as people often have an older apple tree that they want to perpetuate and grafting is the most practical means to accomplish this. Planting seeds collected from the tree will not result in an identical offspring. The seeds contain the genetic information of that tree and whatever tree served as the pollinator. This means that the offspring, the trees growing from seed collected from the fruit, may not be the sweet tasting apple they have been enjoying.

Grafting established apple trees is usually accomplished by cleft grafting. This is done by grafting young shoots, the scion, on the side branches of established trees (referred to as the stock). Cleft grafting is usually done in late April, just after the buds begin to open on the stock. The stock branches to be grafted should be about pencil size diameter, at the point of grafting, and the grafts should be performed within five or six feet from the ground – so the fruit can be easily picked – and about two or three feet from the trunk. The branch is cut cleanly with a pruner then split lengthwise with a sharp knife or chisel. The splitting must be carefully done, splitting across the complete diameter of the branch but only a few inches deep.

The young shoots from the apple tree they want to perpetuated, the scions, are collected from the desired tree in March while they are still dormant. The scion wood should be collected from one or two year old shoot that are about pencil size diameter. This scion wood is cut into 3- or 4-inch that contains at least 3 buds. This scion wood is stored in a plastic bag until April when the stock tree is prepared for grafting. The bag should be stored between 33 and 40°F.



After the stock branch has been split (B), cut the base of the scion wood into a wedge (A) and placed it in the cleft at a slight angle (C). The graft can be held with a thick rubber band cover with a light coating of grafting wax or wound dressing (D). In a few weeks the buds on the scion should begin to expand and the graft begins to take. Be sure to mark the grafted branch so you know which tree was grafted to what in future years! (Picture from North Dakota Cooperative Extension Service)

Pollination

Another person wanted to know about pollinating fruit and nut trees. Pollination is the key to growing fruit and nut trees. Pollination involves the transfer of pollen from the stamens, the male part of a flower, to the pistil, the female part of the flower, the transfer of pollen for most fruit trees is accomplished by bees while for many nut trees wind serves this function.

Some fruit and nut trees are self-fruitful meaning that the pollen from the flowers can pollinate other flowers on the same tree. These trees are called self-fruitful. Other species are self-unfruitful meaning they will not accept pollen from flowers on the same tree. Since we typically plant fruit and nut tree cultivars, plants that have known characteristics, every member of the cultivar are genetically identical meaning they are the same tree. If you plant two trees that are the same cultivar they cannot pollinate one another.

If the trees require bees for pollinator the two trees should be within 200 feet of one another and ideally within 50 feet, Trees that wind pollinated should be within 50 feet of one another.

Fruit trees

Self-fruitful

Apricot (note: the cultivars Moongold and Sungold are self-unfruitful)

European plum

Nectarine

Peach

Sour cherry

Self-unfruitful

Apple

Crabapples (apples and crabapples can serve as pollinators for one another)

Hybrid plums (including Japanese)

Nanking cherry

Pear

Sweet cherry

Nut trees

All nut trees are *self-unfruitful* requiring two different cultivars or trees for nut production.

Filbert

Hazelnut

Hickory

Walnut