

Fruit Tree Grafting - an Introduction

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Why Graft????

- improve pollination
- diversity of varieties
- lengthen the picking period and avoid a ton of one variety of fruit all ripening at the same time
- save special trees (great to have Grandpa's favorite apples growing in your backyard)
- growing from a seed may not give you the same variety due to cross-fertilization
- rework an entire tree ("topwork")
- introduce new varieties without planting new trees
- quicker fruiting than when you plant a new tree
- it is fun!!!!

What Grafting is Not:

- Grafts do not create new types of fruit, they are not a hybrid or a crossbred

Why Grafting Works:

- The cambium layers (the single layer of cells between the wood and bark were the sap flows) of the scion (the new wood) and the stock (the existing wood) match up and heal (callus) so the sap of the tree flows from the existing cambium and into the cambium of the new wood.

What Grafts Well:

- Best grafts are closely related trees, apples to apples, pears to pears, etc. (same botanical genus and species but different variety)
- If same genus but different species the graft may be weak or short lived or not successful at all
- As a general statement, stone fruits are typically more difficult to successfully graft.

When, How and Where to Collect/Store Scion Wood:

- Collect only last season's growth and when it is dormant. Pencil diameter is fine.
- Store in a cold, moist place. 34 degrees is great. Can be in a plastic bag in the refrig with a moist paper towel to add moisture or be old fashion and dig a trench outdoors and fill with wet sand.
- You can often get scion wood from friends and neighbors and some companies sell scion wood.

When to Graft:

- Most grafts are best in late winter or early spring just before or as new growth occurs.

Types of Grafts:

- There are many types, tongue and whip, bench, cleft, tips to side (vener), bark, banana, side, stub, T-bud, etc

What You May Need:

- sharp knife or box cutter
- saw and splitter (for cleft grafts)
- rubber bands or grafting tape or electrical tape or masking tape (for tongue and whip grafts)
- grafting wax or Tree Kote or plastic wrap to help avoid the graft from drying out before the graft heals

Tips:

- Scion wood should be dormant, last season's growth, 1/4" to 3/8th diameter and kept cool and moist.
- the scion should be two to four buds long. More buds just add weight and require too much sap
- Cambium layer(s) must meet properly