

Grafting Trees

Grafting is used to produce a plant variety identical to the original source. Imagine we have an apple tree that is so good that we want to create a whole orchard full of this wonderful apple tree. If we keep the seeds of the fruit from this apple tree and plant them, they will not grow up to be the same tree! This is because the blossom on our tree will have been pollinated by pollen from a different apple tree. The new tree grown from that seed will be like our lovely tree but not identical to it – just like children have traits in common with their parents but are not identical to them. Grafting allows us to produce a clone of our lovely tree - an exact replica.

Fruit trees can be grafted in two ways, from a piece of length of branch, known as a scion – or from a bud.

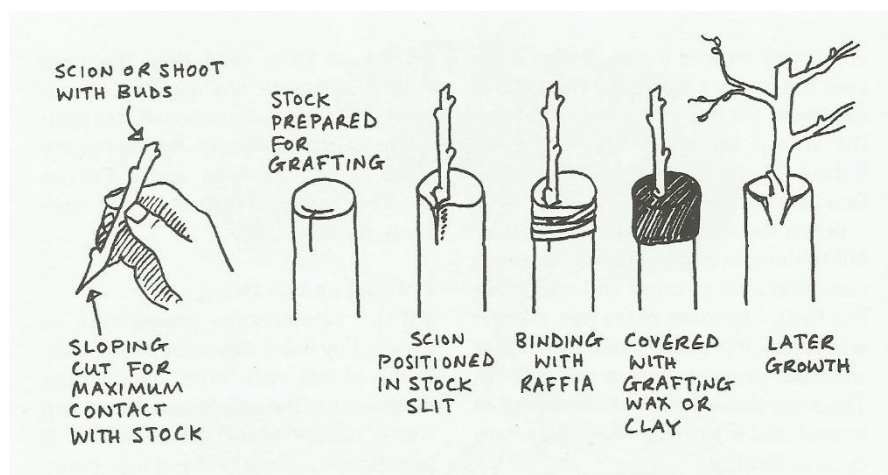
Selecting Scion Wood

- Choose a healthy tree
- Choose mature green wood from the outside/sunny side of the tree
- Cut a 7.5-10cm section with three buds present

Rootstock

Rootstock can be purchased from nurseries or you can use an existing tree

- Cut back the rootstock to between 15-30cm – too low a graft union risks disease getting in from the soil
- The ends of each joining piece, scion and rootstock should be cut in matching clean slices so that when they are joined, as much of the cambium as possible is touching. Alternatively, cut a notch in the Woodstock to accept the scion, as below.
- Leave a small amount of internal scion wood sticking over the top of the rootstock wood to help with callusing.
- Put wax on the graft will help prevent water loss.



Bud Grafting

- Choose a healthy looking bud from the outside/sunny side of the tree that is not dry and shrivelled or with obvious damage
- Using a sharp/grafting knife, cut a small slit into the bark ½ an inch underneath the bud and slowly pull the knife upwards taking in the cambium layer and outer bark without cutting into the heartwood, or inner part of the branch.
- End the slice ½ an inch above the bud, so it comes away neatly.
- Cut a 1 inch vertical slit into the branch where the bud will be placed, cutting only into the bark layer.
- At the top of this incision, cut a cross-wise slit, creating a T-shape.
- Gently lifting the corners where they meet, slide in the scion bud with the growing tip pointing upwards, ensuring that the cambium layers on each are touching.
- Wrap the join in grafting tape to keep it dry
- Next spring, prune off the tip of the branch as soon as the grafted bud begins to grow

Air Layering

Air layering is a method of propagating new trees and shrubs from stems that are still attached to the parent plant.

- Choose a one- to two-year-old stem that is straight and healthy
- Trim off any side shoots and leaves from a 30cm section
- Wound the stem by making a 2.5cm cut through a leaf bud, angled towards the shoot tip
- Apply hormone rooting compound to the wound
- Pack a small amount of moist sphagnum moss into the wound
- Wrap the stem section, loosely, with black plastic, sealing it at one end with weather-proof adhesive tape
- Pack the plastic sleeve with more moss, to a thickness of about 7.5-10cm
- Seal the sleeve with more weather-proof adhesive tape
- Leave in place for around a year.
- Open and check it occasionally for signs of rooting and when new roots are visible through the moss, remove the sleeve.
- Cut through the stem just below the rooted section
- Pot in potting compost. Do not attempt to remove the moss from the roots.
- Water and grow on until large enough to plant outside