

# GRAFTING



Grafting is a great skill to have and has been practised for centuries to reproduce the best apples and pears and more recently to control the size and health of fruit trees as well.

Every pip from every apple or pear tree grows into something new- you will never, ever get the exactly the same fruit again. It also takes 8-15 years to get fruit from a pip grown tree, it takes that long to see if it is any good - out of 100 pips a few are wonderful new varieties but most are not.

Grafting is the way to ensure you have the fruit you like on the size of tree you prefer and soon! Varieties we have today are the collection of centuries of pip grown fruit that were valued enough to graft and spread around the world. A Golden Pippin apple for example was discovered in England in around 1600AD. Someone took cuttings and grafted them soon after. A few decades later someone took cuttings of one those new trees and grafted them, then someone else again around 1700 and so on. Then one of our colonial settlers took cuttings or a small tree over to NZ 150 years ago and now we have taken cuttings for the next generations to enjoy.

There are several ways to graft but here we will just explain the simplest way that is winter cleft grafting.

Before you start read the other information sheets on Choosing Fruit Trees and collecting scion wood: Taking cuttings from old varieties. These explain fully about the root stocks and the scion woods.

You can purchase rootstocks for a couple of dollars each from bigger nurseries like Waimea Nurseries in Nelson. You need to plant them immediately in good soil and ideally get them established for a few months before you graft in the spring. This is not always possible - so try and get a bigger grade rootstock with lots of roots rather than small grade with just a couple of fine roots. This is to ensure there is a good supply of sap moving up into your scion wood. You can graft on to apple seedlings but the size, health and vigour of your tree will be unknown. You can also graft on to a mature tree and have each branch a different variety!

You wait until spring has swelled the branch buds on your root stocks and they will no longer look like just a dead 30cm high stick! This varies from spring to spring but usually in September or October. The best time to graft is after the new moon and before a full moon as the push of the upwards sap is strongest.



First of all split the root stock right across the middle.



Select a piece of your scion wood and cut off a 10cm piece. Use you sharp knife to make a very thin and tidy wedge.



Open the split in the rootstock with your knife and slide the wedge in gently. Make sure the bark on the scion wood is exactly in line with the bark on the root stock. This is the most important step as the sap flow on trees is in the layer directly under the bark- if it cannot flow into your scion wood your graft will not take and the top will die.



Use pruning tape, plumbers tape or some flax fibre to tie the split together. This tape is removed in the autumn.



Use commercial grafting wax to wrap around the join to avoid moisture and insects getting in to stop the healing. Or a ball of clay with a small piece of plastic tied over it works just as well. This is also removed in the autumn.



By the Autumn the scion wood and the root stock are merging together.



After two years they have completely joined and as the tree grows larger it is sometimes very hard to see where the graft was.