

Student 3. Whip and Tongue Grafting.

Reasons Why the Steps are Carried Out.

We want them to be the same size because they have to be binded together, having them the same size will ensure a very successful graft. We also want a healthy root stock because if we start off with a healthy, strong root stock we will hopefully produce a healthy strong plant [2]. The reason the parent plant has to be older than 2 years old as it needs to be mature enough and big enough [2]. It is grown between February to early to mid March because that is usually when the root stock is dormant. They need to be the same size because for the graft to be successful and healthy they should be the same size. Having them the same size will ensure they bind together correctly. Also they will 'lock' into place better if they are the same size and thickness, all leading to a strong end result. The reason the cambium layers must be aligned is so a union between the root stock and scion is obtained. If the two cuts are made properly, the stock and scion will appear to be one, this will ensure the technique has been done correctly. An uneven cut or wavy will result in gaps between the stock and scions therefore an unsuccessful graft [2]. Having two sets of buds will also ensure they grow faster and will ensure they produce pears.

The reason you use rubber or tape is to ensure they are still aligned together (the cambium layers) and they are still united / binded together (the rootstock and the scion). The reason for the grafting wax is to keep the new graft from drying out [1].

You did a sharp thin knife for whip and tongue grafting because you need to take a fine cut, also you need a smooth cut to ensure you do not damage any part of the root stock or scion. By doing a single draw instead of multiple you will get a smooth clean line [2]. You need matching cuts so they will bind [2].