

TRIAL N ERROR ON MIAPPLE FARM – by Peter Cooke

POTTING

Bare Root v Grown in Pots.

Growing young trees for bare root extraction requires suitable soil, suitable sunlight, risk of hot sun damage, hot wind damage, root damage on transplant, sale time limited to when young trees are dormant, water wastage, In ground bugs and pests, spraying and run-off. In a time of adverse weather in-ground trees cannot be moved so protection must be built around them.

Potted trees can be moved out of harms way into a sheltered area, placed in rows and order best suited to growth. Potting mix choice is unlimited unlike soil.

Pots can be moved into name or type order for selection – in ground plants can't.

Trees can be potted up indoors during cold and wet weather. Watering is less wasteful.

Potted trees can be marketed at any time – and if not sold at market – returned to nursery.

Pots – Best suited to Miapple Farm with its adverse weather conditions..

Recommend 4 litre square pots – black plastic.

Plant with 3 litres of choice of potting mix – potting up indoors is optional.

Leave top 1 litre unfilled to help with watering.

Place in Spring sun – grow in north-south rows for max sunlight.

Move under cover of big tree or shade cloth for Summer in December.

Surround West and North sides of nursery with 1800mm high shade cloth fence for hot wind protection.

Grow in East/West rows of 4 or 5 pots wide under cover – the trees will protect one another.

Protect end pots from morning and afternoon sun with shade cloth or carpet or the root systems will cook in the pot.

I pot my young trees in August and September immediately after grafting.

Potting mix – at worst use bagged premium potting mix with 6 month slow release fertiliser.

But mix can be too fine and will pack down with watering into a biscuit like mix in container occupying only half the pot.

OR buy bulk premium potting mix including slow release fertiliser - ideally the mix granules should be about 6mm in size. - usually in bulker bags.

OR buy coarse 6mm standard potting mix and add about a teaspoon of slow release fertiliser per pot as you fill the pots when planting. I buy it this way by the trailer load and is easier to handle and fill the pots indoors if raining. Young tree roots seem to grow better in the coarse mix.

Put two small sheets of newspaper in the bottom of the pot, then add the mix so that the graft is at least 10 cm above the mix when planting your tree.

Potting mix can be poisonous to you if you breathe in the dust, it may contain unhealthy microbes, insects, insect eggs or even weed seeds.

Watering pots – I put one litre in the top of each pot (count to ten seconds) once per week and that is all that is needed.

Do not water the leaf foliage – particularly in hot weather above 25c. Or the leaves will cook in the heat, brown and die.

Bulk watering with a spray system in hot weather is not an option unless done when the temperature drops after dark and the leaves will be dry before dawn. - even then there is a risk of leaf mildew.

I water each pot individually (10 seconds each) using a metre long 12mm water pipe “wand “ attached to a hose with a shower rose on the other end.

Pot maintenance – weed pots and break off any rootstock shoots when you water.

Turn the pots around as needed to keep the young trees intermingled in their rows to protect one another from the elements.

When the buds fatten and leaves are about to shoot, spray the young trees with Bordeaux Mixture (Fungicide) to minimise fungal attack on the young shoots. Usually in early to mid October.

About the end of October to mid-November, insect eggs may hatch and there will be signs of insects eating young leaves – spray with insecticide – I use Avatar® or Bifenthrin®.

Should leaves be affected by powdery mildew, spray with Mancozeb® fungicide.

Fertiliser. After the initial potting where the mix included fertiliser, a level teaspoon of slow release fertiliser should be added to the pot each July and February, keeping in mind that fertiliser is made to release slowly by coating the granules with wax and if there is hot weather coming the wax will melt releasing all the fertiliser at once accompanied by a burst of growth that may outstrip the availability of water from the roots.

My applicator is a half plastic drink bottle (funnel) taped to the top of a one metre length of polypipe – the fertiliser grains are then sent down the tube to each individual pot using a small plastic measuring spoon to feed the funnel.

Pot care Don't allow grass or weed seed heads to grow beside or between your pots or the seeds will finish up in your pots. Mowing grass with seed heads near your pots will have the same effect.

If you use a whipper snipper too close to your pots it will cut holes in the sides and allow water to escape too quickly – fix it by placing the damaged pot inside an empty good one.

By placing pots on a bed of black plastic, it will prevent weed growth between and beside your pots.

Grafting tape May be removed a year after the graft took place – I like to leave it on the young tree which makes it easier to tell whether a young shoot comes from above or below the graft – I then remove the tape after sale.

Animal Pests – Birds are usually not a problem and small birds will keep down the insects. Lizards and spiders are common in my pot nursery and do no harm.

Snakes may be attracted by the water or any bushrats that make a nest under the plastic pot bedding.

Kangaroos, sheep and rabbits will happily graze on young apple trees if they are not fenced out.

My apple rootstock supplier had a lot of trouble with wild deer eating his young apple trees on his farm at the foot of Mount Dandenong.

On rare occasions white cockatoos will eat the young apple tree shoots when they are attracted by the colours of the apple blossom.

The worst pests are the two legged rats (human) who steal the young trees pots and all. Nurseries near the city use powerful electric fences as a deterrent. I just use locked gates and hidden cameras – so that breaking and entering is forced making it a jailing offence.