

Care for your tree

CITRUS trees, our most productive yielding fruit trees, can experience a range of pest and disease problems and now is an ideal time to clean up your citrus trees in readiness for a burst of growth with the first flush of Spring.

Leaf miner, citrus butterfly, fruit fly, fruit piercing moth, mealy bug, aphides and thrip are the main pest problems while the fungal disease phytophthora resulting in collar and root rot can impact on citrus tree health sometimes resulting in tree death.

This past record hot Summer has resulted in the demise of many citrus.

The record hot dry days, absence of rain for many months and no relief at all that may be brought by the odd cool day generally combined with other factors to result in your citrus dying.

In some cases it was as a result of inadequate water or irrigation system failures over Christmas and the holidays that has resulted in the citrus trees dying.

Citrus trees are quite thirsty and to have a healthy tree producing juicy delicious fruit you need to monitor the trees water needs.

While you may think you are putting on heaps of water however the return far outweighs the cost of the water.

My Valencia orange tree produces 500 to 1,000 oranges a year for a cost of way less than 100 dollars.

For every \$75 I spend I get a return of \$500 to \$1,000 of fruit ever year.

Adjusting the irrigation system to ensure the root zone within the drip line of the tree is essential as the tree grows if you want a healthy tree.

Aside from inadequate water in other cases a disease or pest may have placed stress on the tree and combined with the extreme weather the tree has simply given up the ghost and died.

Mealy bug, that white cotton wool like sticky substance that forms on the trees branches and foliage can seriously impact on the tree's health.

The mealy bug live by tapping into the sap stream of the tree robbing the tree of much needed moisture and nutrients, the tree thus needs to work harder to survive.

The mealy bug also excrete a sweet sticky substance called honey dew that builds up on the foliage and branches of the tree.

On this honey dew a black sooty mould can grow.

If this sooty mould builds up it can prevent the sun light getting to the foliage thus again impacting on the trees health.

Mealy bug can be difficult to manage.

Hosing the tree down with sharp jets of water can remove 97 per cent of these pesty bugs, squashing small outbreaks with your fingers is a good management method on small trees or when they first appear.

In the cooler part of the year you can spray mealy bug several times with white oil, the white oil smothers the bug.

Because they often sit on each other the initial spray may only suffocate and kill the outside bugs thus the need for repeat sprays.

White oil, Neem oil, Natra soap and Eco oil are the most common oil



sprays available that are suitable for use.

In some cases frustrated gardeners resort to giving the tree a hard prune to rid the tree of the mealy bug problem.

Aphides can also be a problem from July through to early Spring. As the temperature warms little aphides quickly appear on new Spring growth.

Aphides commonly called plant lice suck on the new foliage causing cell damage that causes distorted leaf growth.

Aphides can also introduce disease to the tree.

Oil or soap sprays will smother these tiny but destructive pests and pyrethrum and malathion are fast action knock-em-down sprays.

Early outbreaks can be managed by squashing with your fingers or washing off with sharp jets of water.

Most sap sucking insects excrete a sweet sticky substance called honey dew and aphides are no different.

If you see ants travelling up and down your tree you know they will be feeding on honey dew.

This honey dew smothers the foliage of the tree and quickly black sooty mould will form on the leaf reducing the trees ability to use the sunlight, the trees health will slowly deteriorate.

Remove the pest problem and no more honey dew and no black sooty mould.

Once on the foliage sooty mould is difficult to remove short of physically rubbing it off.

When trees are flowering with fruit set subsequently occurring very small thrip insects can populate the tree and commence sucking on the young fruitlets causing damage to the peel of the citrus fruit.

If your fruit has previously been affected at fruit set time it may be necessary to closely examine your tree for thrip presence, remembering the thrip when mature are still only 1mm in length.

The foliage of many trees is curling and on close examination a silvery squiggly pattern can be found within the leaf, this is all caused by the leaf miner larvae.

This generally only occurs once the weather has warmed in mid Spring to early Summer.

A small moth lays an egg on a leaf and a small grub hatches and burrows into the leaf and drills itself through the leaf until it grows to 3mm and then pupates in the leaf subsequently emerging as a small moth.

The silvery/white moth is rarely seen as its only 3mm long and lays its eggs at night.

To prevent the moth from laying its egg the most effective environmentally safe preventive method is to spray the foliage with white oil or another of the alternative white oil substitutes.

The moth will land and on discovering the oil will fly off to another unprotected tree.

Eggs are generally only laid on new leaves up to 50mm long so when spraying concentrate on the



newer foliage.

The Citrus caterpillar again becomes active once the weather has warmed.

The citrus butterfly is quite pretty being black and white with red on the tail while the larvae is black and orange striped and when squashed smells of citronella or citrus.

The citrus butterfly generally only lay yellow/white eggs on new foliage growth and tiny caterpillars soon emerge and quickly grow into large leaf munching caterpillars if left unchecked.

Daily check young citrus trees and remove by hand any eggs that are easy to see as the eggs sit generally atop of the newest foliage.

Spray the foliage with the safe environmentally biological control Dipel.

Once sprayed any foliage consumed will almost immediately upset the grub/caterpillar and it will stop eating and die slowly over the next day or two.

Dipel is great as it works on all grubs and caterpillars but is 100% safe for birds, pets and humans. If immediate action is required spray the tree with pyrethrum for a quick kill.

Fruit piecing moth have been extremely active some years resulting in fruit being stung and subsequently dropping from the tree.

In some cases several hundred fruit can drop literally over night. When such fruit drop occurs like this its generally caused by the Fruit piercing moth.

Generally fruit piercing moth are rarely found in Alice Springs only appearing once a decade over the past forty years.

Around 2010 — 2015 we had several repeat outbreaks but they haven't been seen for several years now.

Short of completely netting the entire tree little can be done to limit the impact of the fruit piercing moth as they attack only at night.

Nightly patrols after complete dark with a torch and a tennis racket used to swatting the moths may see the demise of some moths but its bound to be a losing battle.

Fruit fly also attack citrus fruit generally from the time it starts to colour up until it is fully ripe. Lemons and grape fruit the first trees to colour are attacked first with mandarins joining the list as they start to colour up followed by oranges.

Pleasingly for the first time for many years almost no fruit fly were trapped or detected in Alice Springs over the past Summer.

Sticky yellow boards, traps, laying baits and shielding fruit with protective physical barriers can all be used to protect citrus trees from fruit fly.

Remember all infected fruit needs to be collected and bagged to kill off the larvae or little maggots within the fruit before disposing of the fruit.