# **CITRUS**



### **GROW YOUR OWN FRUIT**

First plantings in the garden usually include at least one citrus plant - usually a lemon. Citrus overall embraces an interesting and attractive range of plants from more *ornamental dwarf types* to the larger and more *commercially* productive varieties. Unfortunately, because they appear non-complaining, citrus is usually left to look after itself; however, they do require some care. The following notes are a guide to *situation*, *feeding*, *caring and ensuring the health* of these wonderful plants.



## SITE

A position protected from winds and heavy frost in full sun is ideal. Without as much sun, they will not set as much fruit but for the home gardener this may still be sufficient.

## SOIL

A deep, friable *slightly acidic* loam soil type is best for the citrus. They will grow in light or heavier soils provided some soil preparation is done. Light soils will require some additional WATERWISE CRYSTALS and a MUSHROOM or COW & COMPOST MIX to help retain moisture and add nutrient to the soil. Heavy soils may require mushroom compost and organic matter to aerate, as well as GYPSUM CLAY BREAKER to open soil and ensure sufficient drainage. Good drainage is essential for citrus.

#### **PLANTING**

Make sure the root-zone is moist before planting and then thoroughly water in after placing in position. Be careful to keep the tree level with the surrounding soil. Soil build-up around the trunk can cause collar rot. If you have clay soil, do not dig into this. Raise the bed or plant the tree as above the subsoil clay level if possible. By digging into it a pool can be formed which will collect water below the surface and kill the tree.

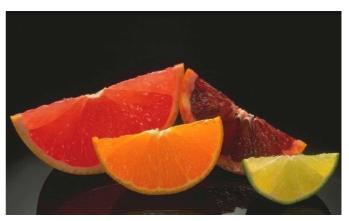
### **WATERING**

Citrus are not deep-rooted trees and thus *require* watering regularly.

Mostly their roots will be 1.2m to 1.5m below the surface. Care must be taken to ensure they have adequate watering during the hot summer months. In addition, be sure not to over water either.

## **MULCHING**

Mulching in spring helps conserve moisture around citrus trees in the hot summer months. A combination of MUSHROOM COMPOST, COW & COMPOST and WATERWISE CRYSTALS or PEAT MOSS will provide excellent moisture holding capacity. Do not build up mulches too closely around trunk. It is advisable to remove the previous year's mulch before putting a new one down. Do not dig around citrus trees as their feeding roots are close to the surface and they resent disturbance.



## **FERTILISING**

In ground citrus should be fed with **DINOFERT CITRUS FOOD** during the warmer months with 1 application. Citrus also responds to applications of **DYNAMIC LIFTER** and **COW MANURE**, thus encouraging healthy growth.

For container growing, it is advisable to feed using OSMOCOTE TREES, SHRUBS & CITRUS or BRUNNINGS CITRUS FOOD during the warmer months, or a soluble solution of THRIVE SOLUBLE FLOWER & FRUIT.

## **PRUNING**

Pruning is really only necessary to remove dead wood and to cut out branches that are rubbing against each other. There is some advantage in training young trees to produce evenly spaced branches to allow light penetration into the centre of the tree.



Citrus that have become too tall may be pruned back severely, make sure you cover the wounds tree wound dressing such with STERIPRUNE. It is advisable to 'skirt' trees. This means removing all shoots to a height of at least 45cm to avoid disease problems, which may occur if branches are able to touch the ground. Remember to remove all shoots that come from below the graft. These shoots may occasionally arise from under the stock and if not removed will grow more strongly then the graft and eventually kill it. Thus, a tree that started as an orange may end up producing lemons, which is the type of under-stock.

### **PESTS**

Always follow directions on the chemical packaging precisely. Remember to pay particular attention to the time from when you spray until when you can safely eat the fruit.

#### **INSECTS**

**APHIDS** – these may attack new growth. **ECO-OIL**, **MAVRICK**, **CONFIDOR**, **MALATHON** or **PYRETHRUM** should control these.

BORERS – may cause die back of limbs that are badly affected. Severely damaged limbs should be completely removed. Pour MALATHON or CONFIDOR concentrate into the holes to kill the insect and spray STERIPRUNE over the damaged bark to stop wood-rotting fungus disease.

**BRONZE ORANGE BUG (stink bugs)** – these insects suck the sap from new shoots. Control the problem with **MALATHON** or **CONFIDOR** as recommended.

CATERPILLARS – several types of these pests attack citrus. Spray with MAVRIK, SUCCESS, DIPEL or BUG GUN as recommended. Any one of these products will control this pest.

**FRUIT FLY** – these puncture the fruit causing it to discolour and become infected with larvae (maggots). Spray with **NATRASOAP** or **CONFIDOR** watching timing of spray to final harvest of fruit.

GALL WASP – the wasps lay their eggs in the new spring growth and burrow through the stem, causing swelling and galling. They can be controlled by pruning the affected shoots and burning them. This must be done before the eggs hatch (mid August). THIS IS A DECLARED PEST AND MUST BE CONTROLLED.

**SCALE** – various types of scale affect citrus trees. **WHITE OIL**, **PESTOIL** or **SCALE GUN** should get rid of these. Bad infestations may need spraying every two weeks apart until cleared.

**SNAILS** – these may eat the rind and the flesh. They are mainly a problem during wet springs and autumns. Sprinkle **SNAIL PELLETS** around tree, but careful attention when applied if animals are an issue.

#### **DISEASES**

BLACK SPOT – this fungus causes slightly sunken brown or black spots on the fruit. Common on Valencia oranges grown in humid coastal areas. Spray with TRIFORINE, MANCOZEB, LIQUID COPPER or FUNGUS FIGHTER, ROSE SPRAY or FUNGUS GUN

**COLLAR ROT** – the bark splits and becomes soggy near the base and gum may be exuded (this is caused by a fungus). Clean away the damaged bark and spray with **ANTI-ROT**. Seal the wound with a dressing such as **STERIPRUNE**.

**MELANOSE** – this fungus disease causes a brown stain or clusters of tiny brown spots on the fruit, leaves and stem. It may accompany die back of twigs.

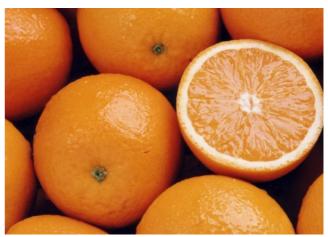
SOOTY MOULD – this is a symptom of scale or aphid attack. It grows on the honeydew excreted by these pests. Spraying with COPPER OXYCHLORIDE or FUNGUS FIGHTER will kill this problem but the pests causing it must also be controlled. ECO-OIL, WHITE OIL or PEST OIL may be useful.

## OTHER PROBLEMS MINERAL DEFICIENCIES

There are various mineral deficiencies that affect citrus occasionally. The most common are:

**IRON** – yellowing mainly of new growth with the veins standing out in green. This is caused by liming too heavily or alkaline soil. Spray and water plant with **IRON CHELATES** at the recommended rate.

MAGNESIUM – this causes yellowing mainly of the mature leaves starting as a blotch and spreading to a characteristic inverted V shape at the leaf tip and may cause leaves to fall prematurely. Branches carrying the most fruit are usually the most affected. Water the soil around the base of the tree. Mix 2 tablespoons of MAGNESIUM SULPHATE (EPSOM SALTS)



with 10 litres of water and soak 8 litres of this into the soil. Spray the tree with remaining 2 litres. It may take several months to correct this problem but the new growth should be green.

**NITROGEN** – lack of sufficient quantities of this will cause an overall pale or yellowish foliage colour and poor, stunted growth. See under FERTILISING.

LACK OF FRUIT – this is often of concern and can be caused by a number of things. When new plants are planted in the ground a flush of growth usually occurs and it may take several years for the tree to mature enough to fruit again. Wheeny grapefruit tend to fruit every second year and mandarins may produce such dense growth they fail to fruit. This is particularly so for Thorny mandarins. In this case prune back to the second or third strong shoot from the fruit cluster or where the fruit has been. Other causes for lack of fruit can be heavy soil, root bound when planted, not enough fertiliser or water, or too much nitrogen or fertiliser.

FRUIT DROP – dropping of some very small fruit is natural particularly when the trees have set a very large crop. If the fruit is ten cent piece size or larger this can be cause by insufficient moisture particularly in mid-summer in hot dry conditions or an acute lack of nutrients. Washington Navel oranges are especially prone to fruit drop which can be over feeding which damages the fine roots that take in moisture.

Sherringhams - "Where your 'Citrus' gardening world begins"