

Wally's Weekly News 17th JANUARY 2009
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TOMATO PROBLEMS

At this time of the year many gardeners have one or more tomato plants growing in either containers or gardens which will be producing ripe fruit that have really great flavour when compared to the purchased ones. That is of course if the plants are grown fairly naturally and the fruit formed are picked either ripe or near ripe.

There are some problems that can happen with tomato plants which are very annoying. Some years you can throw a few plants in the garden and with very little attention, gain an abundance of fruit. On other years you can spend a lot of time caring for plants to lose most of them, and only barely harvest sufficient tomatoes for your own needs. So why the difference? Weather has a lot to do with it and if the weather is warm and humid you are likely to find the disease 'Late Blight' attacking the plants. Or if the weather is cool and wet then 'Early Blight' will be your enemy.

Either of these two diseases, if left to their own devices will decimate your plants resulting in all plants dying or only a few surviving to crop. Looking at the weather pattern this season I would suggest that one or the other of these diseases are most likely to occur in many parts of NZ.

There are two ways protection that can be used without having to resort to harmful chemicals. External protection can stop the disease establishing on the plants by a two weekly spray of **Liquid Copper** with **Raingard** added. This should be started on the young plants as soon as, and continued through till the moisture content in the air is considerably reduced. Watering, kept to the root zone keeping the soil moist, but not wet. There is an excellent internal protection that builds up the immune system of the plants, helping to prevent the diseases getting established called '**Perkfection**'. It is sprayed on to the plants once a month and can be added to the copper spray every second time. I have actually saved tomato plants, badly affected with blight, from dying by using this product. These plants lost all the fruit that were on, but later fruit was fine. There is no withholding period for **Perkfection**.

Another disease that takes tomato plants out fairly quickly is Botrytis or stem rot. The first sign of this disease is the plants look limp as if they need a drink of water. Starting at the top, most leaves have the drooping effect, which journeys down the plant. You can be fooled in the early stages of the disease as the plants seem to recover late in the day when the air cools at dusk. A careful inspection of the plant will reveal a darkened area around the trunk or branches of the plant. Another change will occur in that bumps, or small knobs will appear on the trunk just above the area that is darkening. This is the tomato trying to send out aerial roots to save its life. The dark area is cutting off the flow of nutrients and moisture from the roots to the upper foliage.

This area will rot right through and both top and root system will die. Sometimes there maybe laterals growing below this darkened area and these will be unaffected and will keep the roots supplied with energy. The rest of the plant will wilt and die. If this is the case you are best to cut off the dying top, below the darkened area where there is clean wood and let the remainder of the plant grow on.

What causes the disease? It happens when you remove laterals (side shoots) off the plant and don't protect the damaged area. The disease enters the plant where the lateral was

removed and establishes in the trunk (sometimes in branches). You should protect the area where you remove the lateral by squirting some **Liquid Copper** immediately. Another possibility is the tomato plant rubbing on the stake bruising the skin and allowing the disease to enter. Use a soft nylon material to tie the plants to the stake and wrap some of the material around the stake itself, to create a soft cushion on the stake where the plant is going to tie to it, to stop chaffing. Also ensure that there are several ties all the way up the plant, to the stake, too not only give more ridged support but also to stop damage to the plant from heavy developing fruit. If you have a Supertom you are going to need several stakes, one for each of the laterals that become big fruit bearers. This may also apply to ordinary tomatoes if you allow a number of laterals to become bearers.

One gardener told me when this disease hit some of his plants you found the dark area on the trunk and painted straight **Liquid Copper** over the dark area and saved the plants. This could work if the disease is not too far advanced. I have also with younger plants cut the top off just above the darker area and pushed the trunk into the soil so that it can form a new root system, just like striking a big cutting. Removal of some of the foliage to take the stress off the plant will also help and place the plant in a shaded area while it develops a new root system.

Other points; Do not bury Supertoms deep, to cover the two root stocks. Normal tomatoes should be buried up to the first set of leaves when planting out, as they will root up, in all the trunk area, giving a better root system. Keep plants evenly moist, especially container grown plants, to prevent 'Blossom End Rot' (Black scab on base of fruit) Don't drown the plant especially when young. Even feeding with a fast-slow release fertiliser is best, such as my own preparation called **Wally's Secret Tomato Food** which contains extra potassium and magnesium, vital for juicy, good flavored fruit. A new version of this contains **Neem Tree Granules** so you have both food and pest protection in each application. Best to water in with **MBL (Magic Botanic Liquid)**

If you are using other tomato foods it would pay to give each plant about a teaspoon of **Fruit and Flower Power** every 4-6 weeks. For the extra potassium and magnesium. Remember that tomatoes do best in full sun but sheltered from wind. If you only have open exposed spots, try putting 4 stakes into the ground around the plant and sliding clear plastic bags over the stakes with the bag's bottom cut out. More bags can be added as the tomato plant grows taller. You may need to brace the top of the stakes to keep them apart with a couple of slats of wood, nailed in a cross pattern and tacked to the tops of the stakes. Another point from last season was that tomato plants suffered because of the UV levels due to the ozone hole. Smaller leaves, curled and lack of vigor were the symptoms. A spray of **Vaporgard** could greatly assist if this happens.

Bottom leaves of plants will age and maybe discolor overtime, some may also become mishapped which I believe is caused by a virus. Once the lower leaves become fairly inactive as a result, they can be removed. Protect the wounds as above.

If your plants are still producing new laterals some of these can be used as cuttings to strike and make new plants for later cropping.

Herbicides are very dangerous to both potatoes and tomato plants and even a small whiff of many of the weedkillers will cause the top leaves to become distorted and very strange in appearance.

Be very careful if you are using any weed killers on your property. Never spray your

plants with a sprayer that has had weed killers used in it in the past.

With lawn weed sprays it can take up to 6 months before the clippings are safe to use as a mulch or into the compost.

One gardener told me a few weeks back that all his tomato plants, potatoes and beans showed abnormal new growth.

It had been the result of his composting lawn clippings after having used a spray to kill the weeds in the lawn months previously.

The compost had been recycled into the vegetable garden and showed no problems with any other vegetables except of course his beans, tomatoes and potatoes.

Another important tip is never spray a weed killer on a calm day as the spray mist can rise on the convection currents, float on the air and then at sometime dump on the plants below. Always use these weed killers when there is a bit of a breeze so that all the spray can be directed to the target plants and not float around to end up anywhere.

Neighbors using weed killers on a still day can effect tomato plants not only in your back yard but also several houses down the road.

There is no preventive for this problem other than growing plants in a glasshouse or similar so they can not be dumped on.

Feeding your plants regularly will keep them producing a lot longer into the autumn giving you a long harvest period.

Some gardeners neglect this aspect and stop feeding once they start picking ripe fruit.

Problems ring me at 0800 466464 (Palmerston North 3570606)