

GENERAL GARDENING, BUMBLEBEES AND INSECT PESTS

Recently I have bemoaned the weather conditions of the current gardening season and how unusual weather patterns with lack of strong direct sunlight as a result of hazy skies.

One Dunedin reader emailed me to say rubbish its been the best gardening season ever and some crops have done far better than normal!

Looks like gardeners will need to uproot and move to Southland where the air is fresh and clear, where vegetables, potatoes, roses, cherries and tulips grow the best by far.

I was in Wellington this week and visited a friend who is a retired plantsman. They live on Oriental parade up the side of a cliff overlooking the harbor with a million dollar view.

The cliff, many years ago was terraced out to accommodate all the houses and part of this terracing allowed my friend to have a couple of nice size vegetable gardens and a small glasshouse.

I looked at the sky and saw a lovely deep blue, I looked at his tomatoes and sweet corn all growing well and normal. No stretching, no stunted growth as I have in my gardens and similarly reported by many gardeners from other parts of the country. Ample direct full sunlight and his only problem is keeping the soil moist. So all I can do is ask how come the skies are not hazy over Wellington as they are in many other parts of NZ? Has the Govt past some legislation to prevent haze over the Capital? Certainly a mystery!

This week a grounds man from a school in the north island phoned to tell me about the success he has had with their roses. Because of the poor spring early summer his roses (like mine) took a hammering and the stress caused leaf diseases such as black spot along with poor flowering.

So a few weeks back he gave all the roses a dose of Ocean Solids and Rok Solid, watered them in and according to him it was only a week or so and out came new healthy growths.

Now the roses are looking a treat going into autumn. Feedback like this is really good value.

Many gardeners are complaining about the lack of honey bees and bumble bees in their gardens.

The logic cause is some insecticides sold and used without consideration to our pollinators which are being killed as a result.

The honey bee was firstly hit by the varroa mite taking out likely all the feral honey bees in the country, then along comes Confidor to further destroy the bees.

Bumblebees are not affected by the varroa mites but their numbers have dramatically decreased in my garden and accordingly reported in many other people's gardens.

This week I had confirmation on what I had suspected the reasons for their low numbers, I quote;

"The scientists fed bumblebees neonicotinoid at levels commonly occurring in agricultural concerns and then measured how it accumulated in their brains. They found that the insecticide impaired brain cell function in the bees, causing them difficulty with such tasks as realizing that flower scents imply food and being able to find their way back home after foraging.

Such problems impacted whole colonies, the team found. By providing nests with the same amount of neonicotinoid in sugar water in a cup, the researchers determined that bumblebee colonies that had been exposed to the insecticide fared poorly in the number of bees in their nests as well as in the size and condition of the nests themselves.

"Our research demonstrates beyond doubt that the level of neonicotinoids generally accepted as the average level present in the wild cause's brain dysfunction and colonies to perform poorly when consumed by bumblebees," said Dr Chris Connolly, of the Dundee School of Medicine, in a statement.

Overall, the team documented that low levels of neonicotinoids caused a 55 percent drop in live bees; a 71 percent reduction in healthy brood cells; and a 57 percent drop in the total mass of a nest. "This is not proof that neonicotinoids are solely responsible for the decline in insect pollinators," said Connolly, "but a clear linear relationship is now established.

We can now be confident that at these levels, neonicotinoids disrupt brain function, bee learning and the ability to forage for food and so limit colony growth"

The reference.

<https://www.organicconsumers.org/news/bumblebees-brain-impaired-widely-used-insecticide>

It is about time the EPA, ERMA, MAF banned the sale of neonicotinoid insecticides in New Zealand including the ones for the Home Garden Market, Yates Confidor, Yates Lawn Pest Control.

If we lose our bumble bees in our gardens the world becomes a sorrier place and our food crops that require pollinators suffer badly.

It would be good to see garden shops in NZ make a stand as has happened in the UK and in America by refusing to stock these insecticides, they are not needed as there are many safer alternatives.

There is one aspect about the weather not being more normal is that insect pest population's dont multiply as quickly as they would do under normal summer conditions. On the other hand disease problems become more troublesome.

February is usually the worst month for many insect pests, hot and dry with ample host plants

growing in home gardens and commercial operations.

When you find an insect pest such as caterpillars, whitefly, leaf hoppers, vegetable bugs etc on your plants and you spray with an insecticide of your choice, don't just treat the plants you have seen the insects on. Check all plants and weeds in the area for the same pest and where found spray also.

If you don't you will find that there will be a re-infestation happening very quickly.

Sometimes you just have to spray regularly because over the fence there are thousands of the pests on plants. (Which your neighbors are not trying to control)

As the winter comes on then populations will naturally drop but then many of your crops will also be finished and only the winter vegetables to care for.

If an insect pest can't get to its host plant you have saved yourself a lot of problems trying to control.

The new insect mesh called Crop Cover (by me) that is 4 metres wide and costs about \$5.00 a metre length is ideal to put over your crop or even over branches of a fruiting tree to keep both insects and birds off the crop.

Once the flowering is done and hopefully a few bumblebees are available to pollinate then use the crop cover. It will not harm bumblebees. It would keep codlin moth, guava moth and other pests off the crop thus protected.

Alternatives which can be used include the following safe ones, Neem Tree Granules, Neem Tree Oil, Key Pyrethrum, diatomaceous earth and Liquid Sulphur (for spider mites only).

None of these would harm bumblebees unless they were sprayed directly especially with pyrethrum.

All spraying should be done just prior to dusk when the bees have gone home for the night.

Pyrethrum has a very short life of about 2 hours in UV light so less possible harm to beneficial insects next day. Neem Oil on the other hand does not kill any insect instead it (generally) prevents insects from eating once they have consumed a little of the oil. As beneficial insects don't eat our plants they are not affected.