

Hort Newsletter

Autumn 2010

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Introduction

Most people have received at least half their average annual rainfall since Christmas day. In some ways this has been a welcome relief from what has happened since 2000. In other ways it has cost stonefruit growers and to a lesser extent vineyards a lot of money. Split fruit, fruit rotting disease and downgrading of fruit with poor skin quality have meant significant reductions in income.

The positive side is soil moisture profiles, trees and vines have not looked this good at this time of the year for many seasons. With more good rains forecast in early autumn perennial crops should move into leaf fall in good condition.

Pest and Disease Issues

As mentioned above the rain has caused a lot of brown rot, botrytis other bunch rots, moulds and various leaf disease. As usual the biggest financial losses come from fruit

rotting diseases such as brown rot and botrytis. Once we have damaged fruit coupled with high humidity these diseases become very hard to contain. This has become more difficult over time with more close plantings and bigger canopies.

The big question will be how to deal with these issues prior to and during dormancy.

Options for controlling dormant infections of brown rot and blossom blight are limited now that Benlate is no longer registered. The best possible way of reducing re infestation before spring is to remove any mummified fruit in dormancy and apply copper through autumn. Multiple copper sprays are usually limited to crops such as cherries and apricots that are also prone to bacterial canker.

Copper is a general fungicide and bactericide that can help reduce the amount of infection that may be in an orchard. Provided trees remain in good condition with the available moisture leaf fall should 'normal'. In other words it should not be affected by dry weather or too much salt. What this means is that people can apply a standard copper program starting at early leaf fall, usually in April sometime. Copper sprays in cherries and apricots must start as leaf fall begins to protect against Bacterial Canker. Applying one copper only after complete leaf fall is a waste of time. A copper application after leaf fall should be the last in a series of sprays to protect trees from infection particularly in a wetter autumn.

Pre dormant sprays of Sulphur to protect against powdery mildew have been an industry standard in other years like this. This practise was questioned by some researchers who doubted the ability of Sulphur to affect overwintering fruiting spores. Nevertheless if you have areas where there was active powdery it would be good practise to apply sulphur prior to leaf fall. Make sure to thoroughly remove any mummified bunches that may have been affected by bunch rots from the vineyard.

Prune rust has also severely affected some blocks and in particular a few prominent ones that have been neglected. Obviously it has been a tough year for prunes but a Tilt®/Mancozeb® spray combination will clean up rust infections before they cause too much premature leaf fall.

Cherry Slug has been enjoying a big resurgence in the cooler, moist conditions. They can skelotonise an orchard if they are not controlled. There are several neglected areas where you can witness this pest demolishing leaves. Most insecticides will control populations but check to make sure any product you use is registered.

Queensland Fruit Fly has been present in very large numbers. The closer you are to town the bigger the numbers. It would be fair to say that they were out of control and required constant spraying even of green fruit in some instances. I am interested to hear of anyone who thinks current control measures (Dimethoate and Lebaycid®) are not working.

San Jose Scale. This usually increases in hot dry dusty conditions but has defied expectations and multiplied in numbers. Where this pest has been persistent over a number of seasons, it is probably time to use Supracide® as your dormant spray. This should be looked on as a measure of last resort after full strength oil sprays have failed over several years.

Post Harvest and Pre Leaf Fall Fertiliser

Because of the conditions previously mentioned trees and vines are in better condition than previous years. Many people have already put out various post harvest fertilisers on stonefruit including cherries. The established practise now is to apply Lo Bi urea and boron at early leaf fall. If summer tissue tests indicated high Boron levels then just apply the urea. This has become an established practise in recent years with people realizing the benefit in spring. There are other products on the market that have been designed for pre leaf fall applications. Nitrotain TE is one of these products. Nitrotain TE contains Nitrogen, Potassium, Sulphur, Magnesium and trace elements. Rates for the above will be given on an individual basis.

With vines an established practise has been to apply 10 to 25kgs of MAP post harvest. Like trees, these post harvest applications are designed to build carbohydrate (energy) into the system for the following spring. Remember that MAP only has 10% nitrogen so it is only minimal amounts that are being applied. At 25kgs/ha you would be getting 2.5kgs of Nitrogen which is less than we get from a good storm. I do not see much value in foliar applications of trace elements of vines since the bulk of the vine is pruned. Trace elements are better being applied in spring either to the soil or to the foliage as it emerges.

We appreciate forward ordering of Lo Bi and MAP so we can have it in stock when it is required. We will be carrying minimum stock in store.

Weeds

The rain has meant there are a lot more weeds to contend with this year. With many weeds already reaching maturity and

seeding there will also be a huge seed bank to deal with over the next season. Autumn applications of Glyphosate (Roundup®) have to be done with great care. As a number of growers have experienced, glyphosate is readily absorbed in autumn by trees and vines. The damage will show up the following spring with damaged growth and possible death of young trees or parts of trees and vines. The other important aspect of weeds is the limiting effect they can have on growth particularly with young trees.



The above two rows are of Black Star on Colt rootstock. Black Star is vigorous variety and these have grown very well. Although not as obvious in this photo there is a distinct difference in height and general vigour between the two rows. The row on the right had a mid season application of glyphosate while the one on the left missed out. Rain and time intervened and prevented the grower from treating this row. The point is that without weed competition the row on the right was able to 'power away' even when moisture was a little bit tighter towards the end of January.

It is critical that young trees in particular do not have competition from weeds as they try to establish a root system and a framework.

On another matter, if you suspect weed resistance please let me know so that we can devise a strategy to resolve the issue.

Copper Products.

As for last spring we will be running with three main copper products this autumn.

Hydrocop® is a cupric hydroxide in the same fashion as a Kocide® or Blue Shield® but is registered at low rates into stone fruit. For bacterial canker it can be applied at 105gms/100L.

Bordeaux® a powdered formulation designed to give longer lasting protection. A good product to use on susceptible varieties or where there has been a problem in the past. It is also used as a last spray in a program to give lasting protection into winter. Rate is 500grams/100L

Norshield WG® a red formulation that has been in use for some years. The rate is 105g/100L.

Soil Tests

Autumn is a good time to do soil tests. With the growing season drawing to a close it is a good time to determine what has been used by trees and vines and what will be needed to adjust pH or major nutrients. Over the past few seasons we have had problems after the prolonged use of bore water. These issues were discussed at a grower meeting last year. These problems should not be as pronounced as previous years due to the rainfall of the past several months.

Generally we recommend soil tests every 3 – 5 years depending on things such tree age, crop load, water usage etc. You should definitely test any block that is to be planted this year.

Reminder

A reminder that this Friday we will be having a grower information meeting with the people from OMNIA fertilisers.

Everyone should have received an invite to this event several weeks ago. Jan de Jager from OMNIA will be looking at fertiliser programs. As mentioned in the invite, Jan has been working with Orchardists in Western Australia. They have been getting very good results lifting yields without a loss in fruit quality. Jan will also be looking at Calcium applications.

The meeting is being held at Café de Jour at 1.30 pm and includes a light afternoon tea. We should be finished by 3.00 pm.

Please RSVP by Wednesday the 17th at the latest.

Seasonal Reminders

- Time to order Lo- Bi urea or MAP for orchards and/or vineyards.
- Organise copper for the start of leaf fall sprays.
- Look to apply Sulphur if you have an active infection of powdery mildew.
- Start maintenance on irrigation lines to reduce blockages.
- Organise soil testing for any blocks that have not been tested in the last few years or blocks that are planted this year.

Disclaimer: This newsletter is for the benefit of clients. It is not intended to be a complete analysis of all issues raised in the newsletter. As individual circumstances can vary, further professional advice should always be sought before any course of action is undertaken.