

**18/06/2019**

### **Getting ready for fruit Production**

It's getting down to 'Business time' as fruit production is just around the corner. Spasmodic early flowering has been seen in all crops – most especially First Blush and Masena but some Eureka is not too far behind.

So as the buds swell and then burst the more we can caress the plant to get maximum flowering and minimal fruit losses the better the chance of maximising yield.

This is summarising a few of these areas with specific recommendations.

### **Pollination**

Big question when to get the bees in? Answer, about now or even in place for a couple of weeks ago in advanced areas.

I'm saying rule of thumb is 10 Honey Bees per Ha and 10 Bumble hives per Ha.

Some would say that's 'too much', others 'go for more, the investment is worth it in fruit production and size).

Please note a new Technical bulletin has been added to the **BerryCo Grower Portal** with greater detail around the whole area of Pollination.

### **Key Points:**

#### **Honey Bees**

- Place Bees where they get the morning sun as early as possible.
- If possible place bees at either end of the tunnels so bees can travel less
- Make sure Bees are in place by 5% Flowering
- Conventional wisdom has hives **outside** the bird netting enclosure if they have good access into the enclosures.
- Ideally have Apiarist rotate hives every 3 weeks.
- Liaise with Apiarist to feed sugar water. This can energise bees to forage earlier and more actively.

#### **Bumble Bees**

- Bumbles are happy placed within the enclosures although they will move outside to forage.
- Therefore, place in middle of tunnels in area where Honey Bees are less likely to be active.
- Can shut off entrance to cardboard hives when spraying or remove from orchard.
- Hives seem to last around 6 weeks. So, stagger introduction into the tunnels every 2-3 weeks

## Botrytis protection

We advise the application of the Fungicide '**Switch**' as a worthwhile preventative for Botrytis. It is standard practise for Outdoor growers to have 2 applications at 15% Flowering and 80% flowering. However, when Eureka is at 80% flowering fruit picking has started.

- Switch has a 28-day withholding period. By the time you add a bit more as a safety Margin for slower breakdown under plastic realistically there is only time for **one Switch** application in tunnels.
- Given the earlier flowering (that seems to be across the board with all growers this year) I suggest this **Switch** is applied by the end of June or at least no later than July 7.
- While the tunnels reduce the risk of Botrytis it does not eliminate it. On a typical winter day the plants may still be contending with 90% + Relative Humidity for 13 -14 hours so the Botrytis risk is still very real. This is amplified more during cool, dull weather or prolonged periods of wet weather.
- In the event of Botrytis or signs of Anthracnose closer to fruit harvest then shorter withholding period products can be used such as Captan

## Insecticide Sprays

Scout closely for any egg and hatching activity from Leaf Roller and Tropical Army worm. Those fat, juicy flowering buds are very inviting, and these insects can cause damage and reduce yields. If spotted well timed applications of Dipel will be effective control.

## Foliar sprays to enhance the Pollination process

Stuart Doyle is recommending the application of supplementary Boron (B) especially but also Zinc. These microelements are used in biochemical processes within the plant physiology around the pollination process so there is real benefit in making sure these elements are available. This is especially true given B is turning up in low levels in leaf and leachate testing.

Options for application

Bortrac (Yara product) 2L/Ha

Zintrac (Yara product) 200ml/Ha

These products can be added to fungicide treatment such as '**Switch**' but **Bortrac** and **Zintrac** are formulated so no surfactant is required.

Alternatively, the Solubor plus chelated zinc (From your fertigation recipe or purchased from the merchant) can be utilised. A non-ionic surfactant should be used with these granular products and can also be mixed with a fungicide such as '**Switch**'.

## **Other products**

There are other products with claims and trials indicating improvement in fruit yields and characteristics.

### **Stimplex/Seaweed**

Stimplex recommend 5 applications at 2L/Ha through the bud swelling to green fruit stage. See accompanying brochure. This can be applied via foliar or through the drippers. Later applications coming closer to fruit set better applied via the dripper. Stimplex trials have indicated increase in firmness, size and number of buds per branch over a control not treated with Stimplex.

### **Foliacin**

Elicitor with claims to improve flower set. In BerryCo trials it did affect the flowering and seems to compress the flowering/fruitleting into a more confined timeframe.

0.5L/ha in 250-600L of water. Apply every 14 days with fungicide and/or nutritional sprays until the end of flowering.

Other Elicitors as appropriate