

# SOFT FRUIT NEWS

May/June 2010

## Powdery mildew Vine Weevil

Summary of presentations from the Irish Fruit Growers Association  
Conference Carlow 28<sup>th</sup> April '10

- > Tray plant production
- > The market
- > BASF products
- > Calcium uptake
- > IPM for strawberries
- > Advice from Ulster Bank

### **Powdery mildew**

During harvest it is good practice to alternate sprays of potassium bicarbonate with sulphur. Potassium bicarbonate can be difficult to obtain. A number of companies in England have this product in stock, but there are problems locally. Please contact Anne Stone for the latest on availability.

Some forms of sulphur leave marks on the fruit, but Headland inorganic liquid sulphur is good in this respect.

A product with new on-label approval for protected strawberries is Kindred (mertyldinocap), readily available.

This is primarily an eradicant. It is exciting to have a product for treating established powdery mildew, other than potassium bicarbonate. But note the 3 day harvest interval.

Kindred gives only limited protection, for about 4 days, so should not be included in a prevention programme.

60 day crops of Elsanta and Sonata can quickly develop powdery mildew, so should receive protection in the first week after planting. There is a good selection of actives approved on strawberries so it is easy to ring the changes, keep to a budget and avoid resistance. Approved products include:

Myclobutanil (Systhane)\*  
Sulphur (various products)  
Bupirimate (Nimrod)  
Kresoxim-methyl (Stroby)^  
Boscalid +pyraclostrobin (Signum)^  
Penconazole (Topas)\*  
Quinoxifen (Fortress)

NB Products marked \* are triazoles and those marked ^ are strobilurins. Do not use more than one triazole or one strobiluron in a spray programme.

### **Vine weevil**

Now is a good time to check the area surrounding tunnel houses for the tell-tale notches caused by vine weevil.

Common hosts are primroses, fuchsia, cyclamen, begonia and rhododendron. Container grown plants in gardens are a particular menace. If vine weevils are being harboured nearby then they will be on the move in to your tunnels. Non-drying glue is available in mastic type tubes from Agralan Ltd (01285 860015) to apply on all uprights and prevent the adult females reaching the strawberry plants to lay eggs.

A new vine weevil product available from Bord Na Mona, but not yet registered in the UK, is MET52. Approval may be obtained later in 2010. It contains a beneficial fungus which attacks vine weevil larvae. The granules are incorporated in compost so will only be available in compost bags.

### **On farm production of high quality tray plants**

Gebremedhin Beyene,  
UCD/Teagasc

Research by Teagasc aims to identify the key aspects of successful propagation of tray plants. At Kinsealy elite stock is obtained from the Nuclear Stock Association. It is grown in a glasshouse in peat compost troughs. Runners taken between July 8<sup>th</sup> and 22<sup>nd</sup> give plants which give the most fruit production the following year. The rooted runners are planted in 9 cell modular trays and set outside for misting. They are grown on until natural dormancy, then cold stored until February.

Five growers are propagating using this technique and one is exporting tray plants to the UK this year.

### **State of the market**

Michal Slawski Bord Bia Horticulture

Over the last year the volume of strawberry sales in ROI has been fairly constant, but price per kilo to suppliers has fallen by 8%. The great majority of strawberries are sold through the multiples, with continuing decline in the wholesale market. The picture for other berries; blueberries, raspberries, gooseberries and currants, is of large increases in volume with small decreases in price; but this sector is dominated by blueberries.

### **BASF strawberry products**

Simon Townsend, Agronomy Manager  
Speciality Products, BASF UK

Signum (boscalid +pyraclostrobin) stops *Botrytis* spores germinating. It should therefore be used at or near the start of the spray programme. It also prevents spores of powdery mildew germinating, and in tests at the independent research centre at Gorse in Belgium, gave better control of mildew on strawberries than Systhane (myclobutanil). An incidental benefit comes from a side effect, it has been found to kill two spotted spider mite.

The product Scala (pirimthanil) has a different mode of action. It prevents the *Botrytis* fungus producing the enzymes it uses to digest strawberry tissue. Scala therefore has curative action and should be used later in the programme, during picking.

An older product, Rovral (iprodione), still has a valuable place in the fungicide programme because it is cheaper and has multi-site action against *Botrytis* so resistance is slow to develop.

### **Calcium and the developing berry**

Mark Horner, Plant Impact Ltd

Calcium is used in the plant to form calcium pectate in cell walls. Good uptake of calcium gives better shape, firmness and shelf life to all soft fruit and raises the Brix (sugar) level. It can

increase yield in raspberries, though not in strawberries. Calcium uptake depends on evaporation of water from the plant, and in overcast humid weather in spring there may be insufficient evaporation. Later in the year more calcium is taken up through the roots, but this only moves to new growth, rather than to fruit which has already been set. Calcium moves in the plant with the help of growth hormones called auxins.

Foliar calcium sprays are often absorbed poorly by plants. Mark said that foliar calcium products containing sugars and amino acids are absorbed better, but he claimed that his company's product, InCa, represents the best method of increasing absorption. He explained that it contains a chemical similar to the auxin plant hormone, which helps calcium move into all tissues, including the fruits. Spraying InCa is recommended every two weeks, from one week after planting. It can be mixed with routine sprays. Colm Matthews (Tel 00353 8725633) of NAD in Blakes Cross, Lusk, Co Dublin says he is now supplying InCa to most if not all of the large strawberry growers in ROI. The cost is £120 for 10 litres, which covers 25 acres.

### **Integrated pest management in strawberries**

Neil Helyer, Fargro Ltd.

Neil has found that whitefly are becoming more common in Irish strawberry crops. The type of whitefly should always be identified because the honeysuckle whitefly cannot be controlled by *Encarsia*. In IPM systems honeysuckle whitefly can be treated with Naturalis\_L. This beneficial fungus is most effective if combined with SB Plant Invigorator, which weakens the waxy covering of

insects and allows the fungus to penetrate.

The new product, Borneo, is currently the most effective killer of two spotted spider mite. Growers must strictly use it only once per crop per year, or resistance will develop as it has to other acaricides.

A new insecticidal product going through the registration process is Marigold. It contains *Tagetes* and thyme oils and kills whitefly, aphids, mites and thrips. It will be particularly safe for human consumption and is being registered for organic use.

Serenade ASO, with beneficial bacteria, now has many years of use in America where it was developed, but not all growers here are yet aware of it. Serenade protects against both mildew and Botrytis. It can be used in alternation with chemical fungicides, or reserved for the harvest period where its absence of harvest interval is attractive.

Earwigs are a problem in some strawberry crops. The nips of earwigs make both pickers and consumers unhappy. They can be killed with Pyrethrum 5EC, a natural pyrethrum which is approved, even for organic production. Apply at 4ml/l water. To increase efficacy add a little brown sugar to the spray, since the sweetness tempts the earwigs to eat the sweet tasting sprayed leaves. Make a stock solution by dissolving 100g sugar in 500ml warm water, then use 10ml of stock solution for each litre of spray.

Slugs can do serious damage to ripening fruit and growers find slug pellets ineffective. Neil advised sprinkling a little icing sugar on the pellets before they are placed in the bags or troughs. Slugs are not usually tempted by pellets when sweet fruit is present, so sweetening the pellets makes them more attractive.

## **State of the industry**

James Kearns, Chairman ISFGA  
(Irish Soft Fruit Growers Association)

Prices of strawberries are down by 15-20% since 2008. Supermarkets are looking for divisions between farmers to force down prices. ISFGA wants to encourage those producers selling to supermarkets to work together to maintain prices. Strong producer groups in Europe have proved their value, for example those in France and Spain have accessed large sums of money for packhouses and similar aids to marketing. James said he considered the recent 'Service Charges' imposed by some counties, in addition to rates, as outrageous and requiring challenge. There are good opportunities for raspberries and gooseberries at present. In some cases field crops have become viable again as labour is more available.

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