

# Soft Fruit News

## June 2011

- **Presentations on Fertigation**
  - **Visit to Holland**
  - **Plant tissue analysis**
  - **Topical updates**
- **Climate change for soft fruit growers**
  - **Crop protection news**

### Presentations on Fertigation

Please see enclosed invitation sheet, for the open evening at HDC Greenmount Campus, CAFRE, to

demonstrate use of moisture sensors, and hear the Yara fruit specialist speak on soluble feeds.

### Visit to Holland

Robert van den Zanden of Aardbei Extra has offered to help organise a group trip to Holland. October had previously been mentioned, but Robert has now suggested that the end of September would allow us to see polytunnel table top

crops, while in October only glass house crops would be available. The proposed visits, over two or two and a half days, including the following:

- Grower with table top
- Grower with glasshouse and table top
- Company supplying growers with fertilisers, chemicals, table top and support systems, plastics, bio-control etc.  
[www.voscapelle.nl](http://www.voscapelle.nl)
- Company supplying compost, natural fertiliser and foliar feeds,  
[www.bodembalans.nl](http://www.bodembalans.nl)
- Ardbei Extra to see propagation and cold store where plants are treated against TTSM and tarsonemid mite.

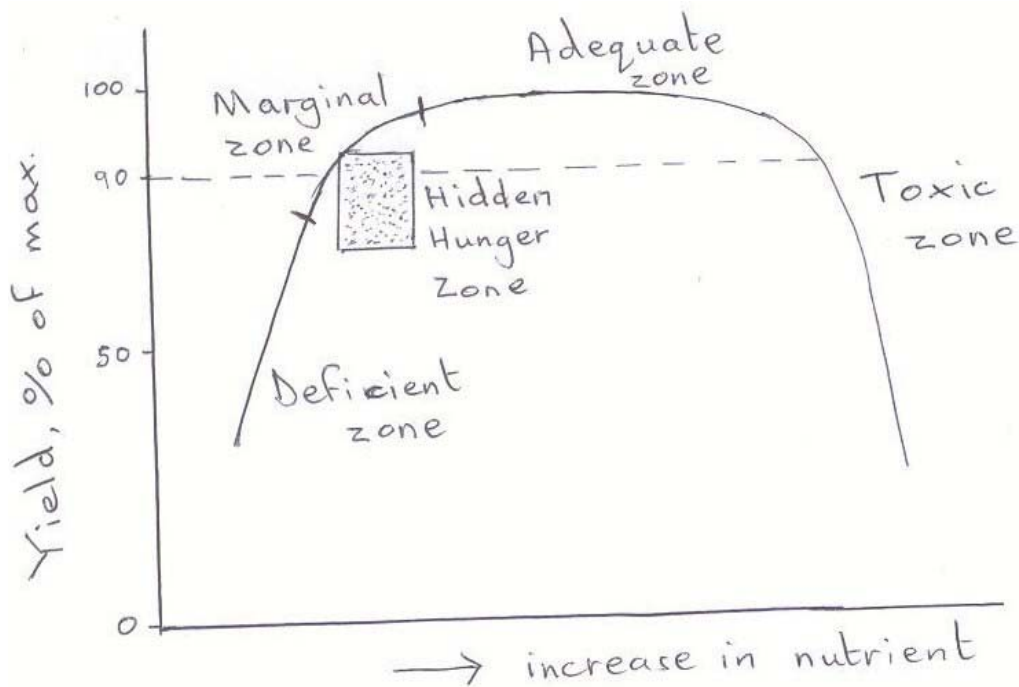
At the Greenmount meeting on June 29<sup>th</sup> there will be a chance to discuss this programme and preferences for dates. Any grower interested in the trip to Holland who

will not be at Greenmount on June 29<sup>th</sup> should please contact Anne Stone with their comments on these proposals.

## Plant Tissue Analysis

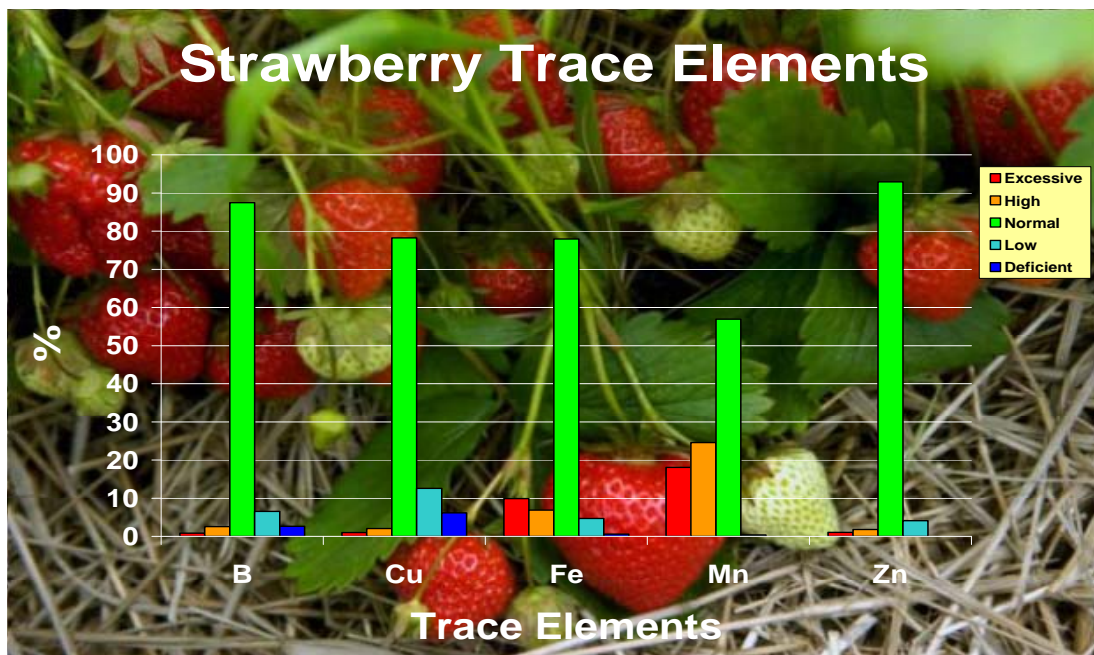
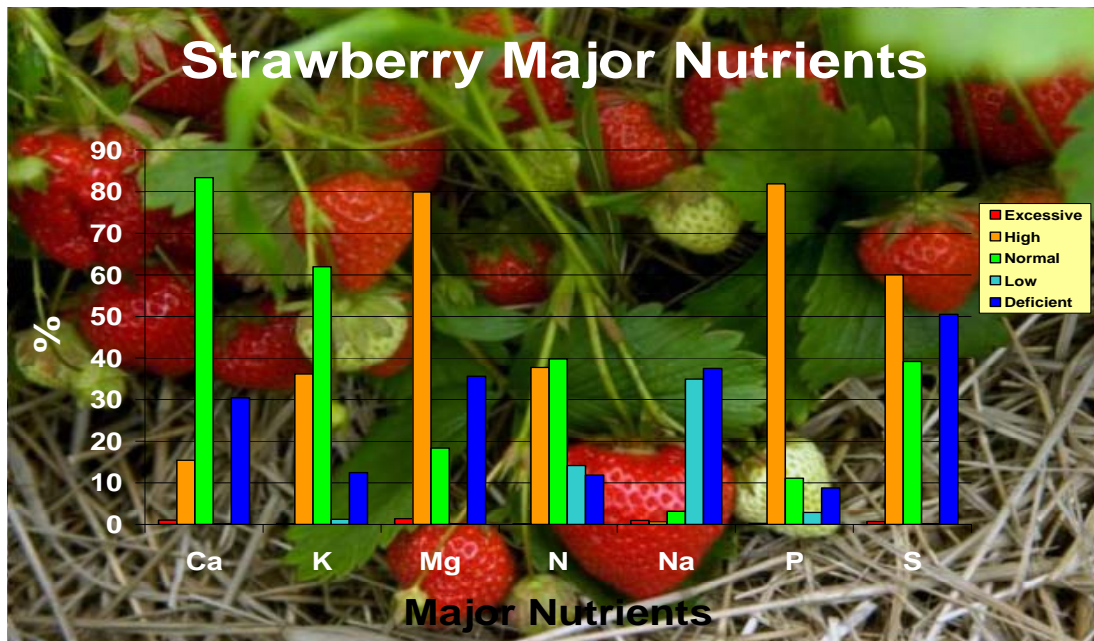
NRM laboratories is one of the companies which carries out soil tests. They advise use of both soil and plant tissue analysis in an integrated nutrient management programme. If tissue analysis is conducted early in crop life then

corrective fertiliser applications can be made that same season before the problems become yield limiting. The graph below shows the hidden hunger zone, where the crop is short of a nutrient with no obvious symptoms.



The charts below summarise the tissue analyses NRM have conducted on strawberries over the past ten years. Minor nutrients are rarely a problem, perhaps because

most growers are using an effective trace element package. The most common deficiencies are of calcium, magnesium, sodium and sulphur.



If you would like a tissue analysis to be undertaken, a sample of 200g of clean, dry leaves should be sent in a loosely tied, labelled plastic bag. Select the youngest mature leaves at mid growth, picking from a number of plants. Avoid any plants or area which is not typical, such as plants affected by a disease or overwatering.

To contact NRM Telephone 01344 886338 The code is C086 and the price is £36.50 + VAT.

An alternative company offering tissue analysis is Landcrop, Tel 01759305116, which was used by a number of local growers in 2010 and charges £23.50 + VAT.

## Topical Updates

**TSSM biological control.** Monitor the number of pests and predators. The ratio should be 1 predator to no more than 30 pests. Repeat introductions of *Phytoseiulus* may be required.

**Thrips** Watch out for flowers which look dirty or speckled, and tap these onto paper. If thrips are present, insecticidal or biological control should take place.

**Vine weevil** are now hatching, so check for leaf notches, first in protected crops and then outdoor. With the removal of bifenthrin (Talstar) against adults the only approved treatments are against the larval stage; biological control using nematodes or chlorpyrifos drenches after harvest.

**Long cane raspberry** planted this spring has generally given rather

disappointing results. This is largely due to wind damage. Fruiting laterals have mainly come from towards the top of the canes rather than evenly from the whole cane. This may be due to the extremely cold temperatures the canes were subjected to in the field before lifting last winter. In most cases there is healthy primocane being produced, which should be removed when it reaches 30cm tall. Only permit primocane growth to remain from the start of harvest, or just before.

**Powdery mildew** is affecting several crops, especially where there is a large canopy. Increase ventilation if possible to reduce temperature and humidity. The following fungicides can be used during picking with careful management to keep correct harvest intervals.

Trade name	active	rate	Harvest interval and comments
AgriKarb	potassium bi-carbonate	50-100g/ 10 l	None Treatment, no prevention
Amistar	azoxystrobin	1l/ha	3 days preventative
Frupica	mepanipyrim	0.9l/ha	3 days, also controls <i>Botrytis</i>
Kindred	meptyldinocap	0.6l/ha	3 days Curative, no prevention
Kumulus DF	sulphur	20g per 10l	None, but can stain ripe fruit
Nimrod	bupyrimate	1.4 l/ha	1 day preventative
Serenade	<i>Bacillus subtilis</i>	10 l/ha	None, Preventative also controls <i>Botrytis</i>
Systhane 20EW	myclobutanil	for rate see label	3 days preventative

If you have difficulty calculating spray volumes for use in a tunnel please contact me.

## Climate change for soft fruit growers

John Wilie of the Meteorological Office gave an interesting talk to DARD staff on May 25<sup>th</sup>. He showed the temperature data which has convinced him that not only are global temperatures rising, but the rises can only be explained when greenhouse gas levels are taken into account. The four main greenhouse gases are water vapour, carbon dioxide, methane and nitrous oxide. Methane is now becoming the most important of these gases.

By the end of the century mean global temperature is likely to increase by at least 2°C. The increase may be even greater, since although both N.Ireland and the UK have been good at reducing greenhouse gas emissions, many countries are not making similar reductions.

### Changes to the climate of N.Ireland

By the end of the century we can expect an increase in winter rainfall by 20% and a decrease in summer rain by 20-30%, with associated lower light levels in winter and higher light levels in summer.

More extreme rainfall events are expected, such as floods and droughts. Stronger winds in winter are anticipated.

### Impact on growers.

- The growing season will lengthen, probably by 20-30 days. Growers should benefit from this increase.
- Water should be stored in winter for summer use.

- Stronger polytunnels will be needed to withstand stronger winds. [Note: A cut flower grower from Oklahoma, at recent presentations in N.Ireland, showed pictures of how tunnels are made to withstand all but a direct tornado hit. The uprights are concreted into holes 4' deep by 18". The hoops are only 4' apart, and are of greater thickness and diameter steel than anything currently available here.]
- Some crops which are little grown here at present, such as blueberries and grapes, will become more viable. We should look at growers in the far south of Ireland and southern England for ideas, just as they are looking at the south of France.

### Colder winters?

The question was raised of how the last two cold winters fit into the picture of steadily rising temperatures. The speaker felt that random fluctuations are the most likely explanation, pointing out that weather only becomes climate when averaged over 30 years, and two cold winters may be lost in a 30 year average. He did, however, admit the possibility that later freezing of the Hudson's Bay area of Canada in recent winters may be upsetting world air flows so that for a 'transitional period' we could suffer more cold winters.

Last summer the Japanese and American long range forecasts were for an unusually cold winter in northern Europe, and they were

proved correct. The Japanese are currently predicting another cold winter ahead for us, but the Americans are predicting average temperatures.

### **Weather forecasts**

Met Office long range forecasts are steadily becoming more accurate. The cabinet office was quietly given a warning in October of the big freeze that came in November. Some long range predictions have not been shared with the public, because the Met Office was criticised in the media after its prediction of a 65% chance of a heat wave in '09. The Met Office web site gives a 30 day forecast, and severe weather predictions for the next five days.

### **Crop Protection Update**

The new Scala label (MAPP 15222) has a harvest interval of 3 days on strawberries and 7 days on raspberries and blackberries. Any remaining Scala of MAPP 11695 with the previous harvest interval of 1 day on strawberries and protected raspberries can be used up till 30/11/12.

### **Note**

In the interests of factual reporting in this newsletter, reference to commercial companies and products is inevitable. No criticism is implied of similar companies and products which are not mentioned.

### **Contact**

Dr Anne stone (Edible Crops Advisor CAFRE)

Tel 02894 426683 or 07500 957895

e-mail [anne.stone@dardni.gov.uk](mailto:anne.stone@dardni.gov.uk)