

# STOCKBRIDGE TECHNOLOGY CENTRE LTD



## AUTUMN NEWSLETTER 2008

### Notes from Graham Ward

The Trustee Board of the Stockbridge Technology Centre (STC) Research Foundation met recently to ensure “we” were looking after the business in the interests of the Horticultural industry. They appointed two new director/trustees; Mr Stuart Coutts to represent the ornamentals sector, and Mr Julian Hargreaves to add processing, soft fruit and large farming interests. Mr Neil Bragg resigned because of his elevation to chair of the Horticultural Development Company (HDC) Board and to ensure no conflict of interest. STC staff would like to thank Neil for his support and help over the last few years.

A brief note, just to remind you all of the STC status and structures. The business is controlled by STC Research Foundation which is a company limited by Guarantee and a registered educational charity. This company owns all the shares in STC which is a normal limited company. The Trustee Board representing the horticultural industry therefore controls all the decisions and **there is no other financial or accountant body which can take other group or shareholder policy overrides into account. Basically therefore as agreed when the industry rescued STC, the business is driven and owned by the industry.** All surplus monies generated in the business have to be reinvested internally and none can “escape” to the outside.

Together with PGRO and East Malling, we are unique in our type of structure. The difficulties of having different masters is being clearly illustrated at Kirton at the moment, and was previously a major problem in HRI with Defra as the master.

We have been involved in discussions about the possible future of Kirton as an asset for the industry. We are now standing back for David Piccaver and PGRO to lead that interest. All I would say is, like the set up of STC these parties will need a lot of grower commitment, including financial commitment if they are to succeed in creating a sustainable longer term business. Emotional hand wringing and hoping that someone will take all the responsibility is not viable in my view, having devoted some six years to this type of business at STC. It can not be done without respected and skilled staff and grower support, the facilities come third.

Whatever the outcome at Kirton the industry will need to think with Neil Bragg, very seriously about how technology transfer is going to take place as the staff retire and the facilities decline. In my view there is a need to retain and build a sustainable expertise base for the future of the industry. If we allow the expertise to fragment around a large number of university science departments (NOT Horticultural science), and disparate often individual consultancies without succession planning and professional spray operations, then any notion of horticultural expertise base will be lost. Many of you may say this is OK and the disparate structure is better monetary value compared with maintaining expensive sites with their attached overheads. You can illustrate your point with the collapse of HRI and the closure of all the original ADAS centres, but have you been living off the family silver?

HDC and the industry must face up to this issue now. Do you need to direct some core funding with strategic control retained by HDC/Industry partnership to build and maintain some expertise? This needs to be spread across the remaining centres. I suggest not a specific centre. If so, you need to get it in place as soon as possible. There is, as I have said recently and will repeat here, some thoughts that our large groups can run

(and do run) internal technology departments based around commercial point of difference advantage. Are there other smaller businesses which are still in the same “market failure” mode as they were when HDC was set up? If there are, how will they be served by the disparate structures?

I have retired after my six year stint on the Pesticides Residues Committee, but I am being replaced by Julian. With Martin on the ACP and Julian on the PRC, I think we at STC are committing significant scientific input for the industry on this pesticide agenda. The importance of pesticides and their availability is illustrated in Martin’s contribution to this newsletter. Here again I think an industry lead partnership with HDC is vital to ensure your interests are best served. Here there is no argument for market failure. The whole industry, big or small needs SOLA and the expertise to maintain a flow of pest control solutions, whether these be chemical or biological.

With my NFU hat on I have pushed very hard, and achieved for the Producer Organizations (PO), so that they can use their PO funds to sponsor research, either individually or together to benefit their sectors. I hope future PO programs will take advantage of this possibility of investment in innovation for their businesses. It should add considerably to HDC funding limitations, particularly on SOLA registrations for some crops where HDC funding is being stretched.

Finally, the Food Security debate. Climate change is compounded with an expensive and limited oil supply. Tackling these issues will create significant opportunities for horticulture in the UK (given we can sort the pesticides). In my view, our businesses will need technology transfer centres of expertise to maximise the opportunities presented, so please ensure you join into a debate with Mr Neil Bragg.

Graham Ward OBE

## **Pesticide Availability in Horticulture- The Challenges Ahead**

A “Pesticide Conference for Horticulture”, sponsored by the Horticultural Development Company and the National Farmers Union (NFU) was held at Stockbridge Technology Centre in Yorkshire on the 7-8<sup>th</sup> October 2008.

A broad range of speakers from the Pesticides Safety Directorate (PSD), a committee and general confederation of agricultural organizations and cooperatives in the EU (COPA-COGECA), Sainsburys, STC, HDC, NFU and industry consultants presented an update and outlined the potential implications of EU legislation on Maximum Residue Levels (MRLs) and future crop protection product availability in the EU. Graham Ward OBE, STC CEO, welcomed delegates to the meeting and outlined the objectives for this 2 day event.

Day one focused on Directive 396/2005 which came into force on 1st September 2008; the aim being to harmonise MRLs across the EU community. Russell Wedgbury, PSD kicked off with a comprehensive overview of the complex legislation surrounding MRLs and Viv Powell, HDC followed by looking at the potential implications of the new regulations for UK horticulture. After a brief comfort break, delegates then heard from Helen Kyle, PSD secretariat to the Pesticide Residues Committee, about how the committee worked and how they would be interpreting and reporting residue results as a result of the changed legislation. Finally, Debbie Winstanley, Sainsbury provided a retailer perspective on how they would be dealing with any MRL exceedances, including imports from outside the EU.

On Day two attention switched to the growing concern about the replacement Directive for 91/414/EC and the impending Parliamentary decision-making process. Rob Mason, PSD provided a clear review of the Commission and Parliamentary proposals and estimated timetable for their introduction and this set the scene

for a particularly interesting day. Luc Peeters from the COPA-COGECA Phytosanitary working group, Belgium was invited to provide a review of the current position from a European perspective. Rather than focus on his formal presentation, Luc opted instead to focus on the political maneuvering and gave the audience an excellent insight into what really drives the decision-making process in the EU. It stirred one of the delegates to comment afterwards:-

*“...Just wanted to say thanks for an extremely interesting conference this week. Excellent speakers and fantastic hospitality. I was inspired to get involved in not just the practicalities but also the politics of pesticide legislation...”*

David Richardson, PSD then presented an overview of what has proved to be a controversial ‘Impact Assessment’ on the proposed replacement Directive and this created a lot of interest and questions. Cathy Knott and Martin McPherson then focused in on the potential impact on the horticultural sector highlighting the potentially critical areas in the different commodities and emphasising the importance of diverse modes of action from a resistance management perspective.

In the afternoon session Sarah Pettitt, NFU had a ‘call to arms’ to stir up action by growers and other interested parties and to encourage them to write to their MEPs expressing their views about the impending legislation and its impact on their businesses. Finally, Neil Bragg, HDC Chairman outlined his plans for HDC and how it could respond to the changing legislative and funding environment in the UK.

The Conference was extremely well attended by growers, consultants, representatives of the crop protection industry and the press with some 110-120 delegates attending on each day. STC would like to thank both the HDC and NFU for their generous sponsorship of this event, to Hilary Finney of Food Solutions for supplying the excellent locally sourced luncheon menu, to John Richardson and Ian Nelson of Johnsons of Whixley for providing an excellent display of plants for the event and finally for all the delegates who took time out from their busy schedules to attend the event. Anyone requiring further information should contact Dr McPherson at STC ([martin.mcpherson@stc-nyorks.co.uk](mailto:martin.mcpherson@stc-nyorks.co.uk)).

It is evident that there are two areas where we could have impact in the debate. Firstly, EFSA involvement: If the Commission were to involve EFSA in undertaking a scientific risk assessment for any active substances that falls foul of an initial hazard trigger approach this would be of considerable reassurance. Whilst the outcome may be the same, it would be in the knowledge that scientific considerations had taken place prior to revocation.

Secondly, Import Tolerances : There appears to be an assumption within the Commission that the new approach proposed will safeguard EU consumers as residue levels will be lower. However, that is evidently not the case as they will merely be substituted by imports from outside the EU where they can legitimately continue to apply pesticides that are not approved in the EU and bring them in using ‘import tolerance’ arrangements in the current legislation. There are two separate issues here...Is it ethically acceptable to export any implied risk of pesticide use to 3<sup>rd</sup> countries who are perhaps less able to provide the strict safety measures that are usually taken for granted in many EU MS? Also, any attempt to prevent this ‘import tolerance’ process could spark a trade war and this could have disastrous consequences for everyone involved. Clearly, there is a need to clarify this situation and to ensure MEPs are fully aware of the facts prior to the final vote in a month or two time.

Martin McPherson

**Plant Clinic**

What a fantastic summer we've enjoyed this year – well that must be what all the downy mildew, blight and root-rotting fungi and bacterial plant nasties must be saying, because, lets face it, they have had another incredible year for optimum growth and infection. Another cool and damp (wet) summer has allowed these pathogens to romp through our crops and gardens destroying plants and necessitating careful crop management and additional applications of crop protection products to produce a saleable product. Downy mildews have been particularly problematic on a whole range of crops this year, not least on impatiens.



*Downy mildew sporulation on the underside of the leaves.*

Impatiens are widely used to provide summer colour in amenity planting schemes. Seed or cutting raised plants are often well protected by applications of fungicides during propagation, however, once planted in our urban landscape they are often left to fend for themselves. By the time the plantsman realises that there is an outbreak of d. mildew in the crop it's often too late to do much about it as the pathogen sweeps through the dense planting schemes leaving a mess of defoliated and rotting stems in its wake.

*Downy mildew infection in bedded out I. walleriana  
Note the high level of defoliation and absence of flowers*



Regular monitoring, familiarity and early recognition of symptoms – leaf yellowing, lack of plant vigour and the onset of sporulation on the underside of leaves – are paramount in keeping the pathogen in check, especially if we are to have more cool wet summers in the future. We have been kept busy in the clinic this season both diagnosis and advising growers on management programs for these wet weather pathogens.

The clinic team are always happy to receive samples whether it is just to confirm your suspicions about a problem or to get to the bottom of something new to you. The clinic provides a great communication stream between you – the horticulture industry and us, the problem solvers. We use the clinic and discussions with colleagues in other plant clinics and research groups to act as a barometer of new, old and existing crop problems. Information can often be used to determine whether larger research projects are needed to help growers get control of a particular problem.

The clinic is easy to use, submission forms can be downloaded from the STC website [www.stc-nyorks.co.uk](http://www.stc-nyorks.co.uk). We charge a standard £55 for diagnosing a crop problem, and pride ourselves on delivering a rapid cost-effective service to our clients.

Cathryn Lambourne

## **New projects - Agronomy**

Earlier in the year we were contacted by a local University who were interested in sub contracting the growing on of some medicinal plants at STC. They had run out of glasshouse space and wanted to use STC's facilities and expertise. As a result of this enquiry we now have four 200m<sup>2</sup> compartments committed to their project and all have blackout screens over double benches to manipulate day-length. In addition to this we have also grown a large field area of plants and converted a redundant cold store to a drying room to be available to the University for their project. The contract runs from April 2008 to November 2009 and we hope that this will be the start of a mutually beneficial relationship.

## **Peat and composts**

This is an important area of business for us, having developed a good reputation over the years. The work falls into various types:

- We undertake the growing part for the PAS100 test and have seen a dramatic improvement in quality of the composted green waste materials being sent for testing. Back in 2004 some products were dense and horrible to deal with. Now they are generally very free flowing with much lower bulk densities.
- Evaluating new wetter products for peat using the tests developed over the past 2 years. The results have been staggering and another satisfied client.
- Helping companies independently evaluate a range of existing and new products for ornamental and vegetable species.
- Helping companies develop reduced peat composts for the professional and amateur markets.

## **Year of Food and Farming**

This formally ended at the end of the 2008 academic year and overall was rather a wasted opportunity within this region and perhaps elsewhere as well.

At STC we helped play our part by:

- Establishing 10 school growing areas in Barnsley and Sheffield and getting them growing as part of a local DoH funded project.
- Increasing the number of schools involved in our growing project to 30 with 950 primary children visiting STC for 4 visits.
- Running Food Live for 4 days in July 2008 where 480 pupils could learn about growing, harvest vegetables and salads and making healthy pizzas and carrot cake buns.
- Hosting a training event for Bradford and Leeds Secondary school teachers on linking growing and science and trying to show case our industry.

- Hosting a training event with North Yorkshire Business Enterprise Partnership (NYBEP) for North Yorkshire Primary school teachers on setting up growing area and growing.
- Piloting conservation and habitat half day visits for Primary schools with each child making a nesting box to take home.
- Participating in a 'Grow it, Cook it' as part of York Food and Drink Festival.

All the above would not be possible without the support from English Village Salads, Rijk Zwaan Seeds, Bulrush Horticulture, the organisers of the York Food and Drink Festival, Yorkshire Forward Cooking Bus and Joanna, Jane, Catherine and Julie our patient session leaders.

Plans are already underway for 2009. If you would like to support us then please contact us and together we might be able to re-connect more of the public with food production and increase the knowledge of tomorrow's consumers.

Julian Davies

## **Events and Projects**

STC hosted its annual open day in support of British Food Fortnight during September. The event was well supported by both local traders and the general public. In fact there were many new faces and the lovely weather made it a very enjoyable day. We focused activities on "food" as much as possible with children's cookery, making edible hats and sowing cress sheep, milking Daisy the cow, and we had an area in the field for PYO green beans and onions. This was really well received and something we will consider again for next year. The open day also highlighted the schools plots and we had many children showing their families what they had been doing during school visits.

STC has been part of the RSPB Volunteer & farmer Alliance Project this year. This project started in 1999 and went national in 2000. It has proven to be a huge hit with farmers, and around 3500 farms have had surveys since then. The aim of the project has always been to raise awareness of wildlife amongst farmers and to encourage them to protect and work with the birds on their farms. STC had 4 surveys undertaken this year. We use the information from the surveys to inform visiting school groups and other visitors about farming and conservation. STC can bring this alive by showing the conservation measures and the variety of habitats and food chains on site. All birds recorded during surveys are listed according to their conservation status. Birds with "Red" status (have declined by more than 50% over the last 25 years) recorded at STC this year include – House sparrow, Reed bunting, skylark, Song thrush, Spotted flycatcher, Tree sparrow and Yellowhammer.

We are currently putting together a proposal to bid for specific lottery money for a vegetable box scheme. The aim of our box scheme is to target disadvantaged groups, including the young and old, and it will also take into account areas where shops, and access/transport to shops is limited. Our project is in partnership with Selby Association of Voluntary Services (AVS). We are currently running a pilot for the project funded by NYCC, in the areas of Brotherton and Sherburn to gather necessary feedback to make our bid. Selby AVS have organised the delivery of boxes to community groups in these areas, and there have been cookery demonstrations given to families showing how the different fruit and vegetables can be used. Recipe cards are also supplied with the boxes. Initial feedback is very positive and we hope to include bringing groups here to experience the countryside and to take part in some aspects of growing.

Julie Langdale

## The farm

We took the decision earlier this year to decommission our 2 large steam boilers which have heated all our glasshouses for many years. As they rely on very large quantities of heavy fuel oil which has risen dramatically in price, they have become uneconomical to run. We are replacing them with smaller, more energy efficient light oil boilers and 8 of these boilers are currently being installed to heat individual glasshouses or small blocks of glass. The main benefit will be the large reduction in running costs. The new system should be fully functional by the end of the year.

The seed cauliflower crops have all been threshed and the seed is awaiting collection. Cauliflower crops for next season have all been planted and are growing well.

Despite the poor summer and late harvest, crop yields were good. Our winter wheat crop of Humber produced over 4 t/acre. Our spring barley crop of Tipple passed the grade for malting barley, and likewise our spring bean crop of Fuego has been sampled and passed for human consumption – destination Egypt.

Next season's winter wheat crop was drilled in early October, along with the many cereal trials that we are undertaking for Bayer Crop Science. Bayer is conducting work on fungicides, herbicides, slugs, seed treatments and new varieties. We also have 3 oilseed rape trials underway for Bayer together with work on vegetables. The open day held at STC for Bayer during July this year was a great success with over 300 attendees. Farmers and advisors spent the day walking and observing the many cereal demonstration plots. Next year's open day for Bayer will be held on 1<sup>st</sup> July 2008.

Michael Langdale

## Weather for Winter 2007/2008

	December	January	February
Mean max. temp	8.3	9.9	9.7
Mean min. temp.	1.8	3.5	0.5
Mean 10cm soil temp.	3.3	5.2	3.9
Mean 30cm soil temp.	5.1	5.7	4.9
Mean 100cm soil temp.	6.9	6.3	5.9
Total rainfall	33.0	130.5	23.3
Mean sunshine hours	1.2	1.1	2.7
No. days air below 0°C	9	5	11
No. days ground below 0°C	9	9	15
Radiation MJ/m <sup>2</sup>	46.51	68.20	106.51

## Weather for Spring 2008

	March	April	May
Mean max. temp	9.8	12.4	18.0
Mean min. temp.	1.8	3.4	6.6
Mean 10cm soil temp.	4.7	8.0	14.2
Mean 30cm soil temp.	5.7	8.2	14.0
Mean 100cm soil temp.	6.2	7.6	12.0
Total rainfall	65.1	52.6	29.2
Mean sunshine hours	3.6	3.3	6.5
No. days air below 0°C	6	3	1
No. days ground below 0°C	14	12	6
Radiation MJ/m <sup>2</sup>	223.28	362.10	530.06

## Weather for Summer 2008

	June	July	August
Mean max. temp	19.0	21.8	21.2
Mean min. temp.	9.1	11.7	12.8
Mean 10cm soil temp.	16.8	18.8	17.3
Mean 30cm soil temp.	16.2	18.0	17.6
Mean 100cm soil temp.	14.9	16.5	17.2
Total rainfall	72.9	60.1	128.4
Mean sunshine hours	4.6	4.9	3.6
No. days air below 0°C	0	0	0
No. days ground below 0°C	3	0	0
Radiation MJ/m <sup>2</sup>	485.11	503.19	323.36

## Conference room

Stockbridge Technology Centre has a conference room on site which is available for hire. The facility comfortably seats 25 people in a boardroom style arrangement, and 60 people in a lecture room seating arrangement. Buffet lunches, tea and coffee can be ordered if required. For further information, or to make a booking, please contact Ann Black. Tel: 01757 268275 e-mail: [annblack@stc-nyorks.co.uk](mailto:annblack@stc-nyorks.co.uk)

For further information on the newsletter or anything else you would like to ask us, please call on 01757 268275