

# Biocontrol and IPM Group

In 2010, the AAB's Biocontrol Group organised separate conferences on 'Biopesticides' (21 April 2010) and 'Advances in Biocontrol' (17 November 2010). For the 'Biopesticides' conference the AAB joined forces with the International Biological Control Manufacturers' Association (IBMA) to provide an update on the range of biopesticides that were available to UK farmers and growers. The programme ensured that users had realistic expectations about the performance of such products and understood how to use them to best effect. There were success stories about individual products and examples of how biopesticides had been integrated into whole integrated pest management (IPM) programmes. While that event was targeted at 'industry', the 'Advances in Biocontrol' conference was designed to provide researchers and extension workers with an opportunity to publicise their work. The conference provided an ideal opportunity for young scientists, experienced researchers and practitioners to detach themselves from their usual day-to-day pressures and become totally immersed in IPM in its broadest context. The interaction with like-minded people with complementary expertise enhanced thinking and helped to promote collaborative ventures. Both events were highly successful and the delegates independently voted to repeat them in 2011. As about 40% of the delegates had attended both events, the AAB Biocontrol Group decided to run the 2011 events on consecutive days with a conference dinner on the evening in between. This provided an opportunity for further interaction under less formal circumstances. The following is a brief report on each of those 2011 events:

## Biopesticides 2011

The 2011 Conference addressed current policy issues with particular reference to the new European legislation and the Sustainable Use Directive (SUD). The programme also explored technical developments and important factors relating to the successful implementation of biopesticides.

Sponsors included Russell IPM, Fargro Ltd, HDC, IBMA and Rob Jacobson Consultancy Ltd. The role of Chairman was shared between Rob Jacobson (Convenor, AAB Biocontrol Group) and Phil Walker (Chairman, IBMA UK).

The keynote speaker, Dr David Cary (Executive Director, IBMA), set the scene for the rest of the day by questioning whether we were approaching a new era with respect to government and regulatory support for biopesticides across Europe. He explained how the implementation of the EU's SUD, reform of the Common Agricultural Policy and impending Water Use Directive provided unique opportunities to enhance the registration and use of biocontrol products. Rob Mason (Director, Chemicals Regulation Directorate) then described the policy and strategy of CRD in meeting its obligations under the SUD. He addressed several of Dr Cary's concerns and assured delegates that UK businesses would not be put at a competitive disadvantage by the 'gold plating' of European Directives. Dr Anne Buckenham (Director of Policy, Crop Protection Association) concluded the policy session by exploring the potential impacts of the



Dr David Cary, keynote speaker at Biopesticides 2011

changing legislation on crop protection practices. She envisaged both positive and negative effects of the legislation and explained how we must retain as many as possible to meet the challenge of producing more food with less impact.

Prof Konstadinos Mattas and Dr Efthimia Tsakiridou (Aristotle University of Thessaloniki) provided a summary of the EU-funded project, TEMPEST, which had explored the theoretical development and empirical measurements of the indirect costs of pesticide use. This dealt with the complex issues of external costs in their broadest context, including the impact on the environment, operators and consumers. They applied theoretical models to several case studies based in eight different countries to study the probable effect of applying taxes and/or levies on pesticides. The results were presented giving interesting insights from consumers which could influence future policy implementation.

Dr Phil Morley (Plant Science Company) represented the Soil Association describing the attitudes of organic farmers and growers to the use of biopesticides as well as their current use within organic growing systems throughout Europe.

The conference then moved onto more technical topics with Dr David Chandler (Warwick University) taking an interesting view on the integration of biopesticides with synthetic chemical products. Dr Toby Bruce (Rothamsted Research) and Dr Owen Jones (Vice President, Suterra) respectively described the development and role of semiochemicals in IPM programmes. Dr Paul Sopp (Fargro Ltd) introduced two new biopesticides, Metarhizium and Gliocladium, which had been brought to the UK market in 2011. Viv Powell (HDC) provided a comprehensive introduction to the HortLINK SCEPTRE project, which should identify further useful biopesticidal products.

The final session of the day looked at the practicalities of implementing IPM in UK crops. Dr Andy Brown (Product Development Manager, Becker Underwood)

# Conferences in November 2011

explained the importance of technical support for biologically-based crop protection products and Jon Marcar (Lead Agronomist, Berry Gardens Growers Ltd) provided a case study of the use of biopesticides within IPM in commercial strawberry crops.

The conference was so successful that delegates voted to make it a regular event at 18-24 month intervals depending on the speed of political and technical developments in this field.

## Advances in Biocontrol 2011

The overall objective of this conference was to explore novel means of providing alternatives to conventional chemical interventions in crop protection through integrated pest management and integrated crop management as well as classical biological control. The emphasis was on biological control but related techniques, such as semiochemicals, cultural measures and physical control, were also included. In order to involve as many people and topics as possible, speakers were restricted to slots of 15 minutes. The intention was to create awareness of current work and pave the way for future interactions rather than to present detailed research results.

There were a total of 18 presentations with a pleasingly large proportion of young scientists, some of whom were taking to a public platform for the very first time. Corin Pratt (CABI, Wallingford), Dr David George (Lancaster University), Dr Josiane Le Corf (INHP Agrocampus Ouest, France) and Dr Michelle Fountain (East Malling Research) described a wide range of approaches to classical biocontrol, habitat diversification and conservation control in outdoor situations. Jude Bennison (ADAS), Dr Luke Tilley (STC), Dr Richard GreatRex (Syngenta Bionline) and Dr Keith Walters (Fera) reported on new or improved methods of using specific macro-biological control agents in glasshouse crops. Two recent graduates of Imperial College, Clare Tickle and Jade Taylor, described their MSc projects which respectively investigated the threat of hyperparasites to IPM of aphids and a new method of boosting biocontrols of predatory mites in tomato crops.

The third session of the day focused on the use of entomopathogenic fungi and nematodes. Dr Dave Chandler (Warwick University), Dr Tom Pope (ADAS) and Gareth Martin (Becker Underwood) reported on new methods of controlling sciarid flies, shore flies, vine weevils and the recently introduced leaf mining caterpillar, *Tuta absoluta*.

The final session of the day brought together a number of novel approaches to pest and disease control which could have tremendous future potential. Catherine Walker (Imperial College) and Dr Neil Morrison (Oxitech Ltd) described two different methods of reducing pest population growth by releasing sterilised insects. Dr Nayem Hassan (Russell IPM) then provided a brief but comprehensive summary of pheromone mediated pest management strategies.

In the only paper which tackled disease control, Fiona Taylor (SASA, Edinburgh) described her work on the control of soil-borne potato diseases using Brassica spp. mediated biofumigation. In the future, the AAB's renamed 'Biocontrol and IPM Group' will be encouraging a larger proportion of papers and posters on non-chemical of plant diseases.



Speakers at the 2011 Advances in Biocontrol conference

The AAB are grateful to Russell IPM, Fargro Ltd, HDC, Syngenta Bionline and Rob Jacobson Consultancy Ltd, who sponsored the 2011 Advances in Biocontrol conference. Phil Walker and Rob Jacobson chaired the sessions and led discussions.

## Advances in Biocontrol 2012

There is no doubt that the 'Advances in Biocontrol' conference has become a firm fixture on the UK's calendar of IPM events. Our intention in 2012 is still to create a gathering of the biocontrol community at which delegates meet and share their knowledge and skills. At the suggestion of 2011 delegates, we have made changes to enable more time for informal interaction between participants. The conference will begin early afternoon on 16 October so that delegates can travel on the day. We will work a little later into the evening than in the past with the option to stay overnight and enjoy a conference dinner. The event will finish after lunch on 17 October.

The event has been fully subscribed in previous years and we strongly advise you to register your interest as soon as possible to secure your place. Titles of papers and posters should be submitted for consideration by 6 August 2012. The contributions selected for the final programme will be announced during August 2012.

Dr Rob Jacobson  
2011 Convenor, AAB Biocontrol Group