

ASSOCIATION OF APPLIED BIOLOGISTS FORWARD CONFERENCE PROGRAMME

2010

- 21 April **Biopesticides conference**
Olde Barn Hotel, Grantham, UK (Biocontrol Group)
- 27-29 April **Agri-environment schemes - what have they achieved and where do we go from here?**
University of Leicester at Oadby, UK (CATE Group/BES Agricultural Ecology Group)
- 10-11 May **Non Food Uses of Crops**
Wyboston Lakes Conference Centre, Bedfordshire (PP&CI Group)
- 8-9 June **Advances in biotechnology and molecular plant breeding**
Rothamsted Research, Harpenden, Herts, UK (PP&CI Group)
- 29 June - 1 July **Landscape Management for Functional Biodiversity**
Holiday Inn, Impington, Cambridge, UK (IOBC/WPRS)
- 5-7 September **International Advances in Plant Virology**
Wageningen, the Netherlands (Virology Group)
- 7-9 September **OECD Conference - Delivering Food Security with Supply Chain Led Innovations: understanding supply chains, providing food security, delivering choice**
Royal Holloway, Egham, Surrey, UK (OECD/Food Systems Group)
- 14-15 September **3rd Symposium on Potato Cyst Nematodes**
Harper Adams University College (Nematology Group)
- 15 September **Development of new technology by machinery manufacturers**
Harper Adams University College (PP&CI Group)
- 14 December **Advances in Nematology**
Linnean Society of London, Piccadilly, London, UK (Nematology Group)
- 15-16 December **Water and nitrogen use efficiency in plants and crops**
Olde Barn Hotel, Grantham, UK (PP&CI Group)

Further information about the AAB and online booking for these conferences is available on the AAB website

<http://www.aab.org.uk>

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ASSOCIATION OF APPLIED BIOLOGISTS

President: Professor Michael Jeger, PhD, FIBiol, FIMA, FLS



A one-day conference

at the Linnean Society of London, UK

on 15 December 2009

PROGRAMME AND
BOOKING FORM

Advances in Nematology

Photographs by kind permission of Simon Gowen and Barbara Pembroke (University of Reading)

Advances in Nematology

at the Linnean Society of London, UK

on 15 December 2009

PROGRAMME

(5 BASIS Points have been awarded: 3CP; 2E)
BASIS register will be at the registration desk

10.00 REGISTRATION AND COFFEE

10.25 WELCOME

Session 1

Chair : KEITH DAVIES (Rothamsted Research, Harpenden, UK)

10.30 *Invited Speaker*

Nematodes in a changing world

SIMON GOWEN (University of Reading, UK)

11.00 **Influence of temperature on the development of the temperate root-knot nematodes *Meloidogyne chitwoodi* and *M. fallax***

WIM WESEMAEL (Institute of Agricultural and Fisheries Research (ILVO), Merelbeke, Belgium), ALAMGIR KHAN (Macquarie University, Sydney, Australia) & MAURICE MOENS (Institute of Agricultural and Fisheries Research (ILVO), Merelbeke, Belgium)

11.15 **Relationship of inoculum densities of *Meloidogyne incognita* and plant age of tomato**

TARIQ MUKHTAR (University of Reading, UK), ISRAR ARSHAD, MUHAMMAD ZAMEER KAYANI (Pir Mehr Ali Shah Arid Agriculture University, Rawalpindi, Pakistan) & ALI MURAD RAHOO (University of Reading, UK)

11.30 **Protein biomarkers for nematode infections of pea**

AL-SADEK GHAZALA, HEATHER MACDONALD & PETER SPENCER-PHILLIPS (University of the West of England, Bristol, UK)

11.45 **Plant defences induced by foliar application of jasmonates reduces infection of *Meloidogyne incognita* and *Globodera pallida* in *Solanum lycopersicum***

ROSANE CURTIS, MICHAELLA MATTHEWS (Rothamsted Research, Harpenden, UK), PANKAJ (Indian Agricultural Research Institute (IARI), New Delhi, India), MICHAEL A BIRKETT, BARRY PYE, JOHNATHAN NAPIER, JOHN PICKETT & BRIAN KERRY (Rothamsted Research, Harpenden, UK)

12.00 **A rapid method for release and multiple strand amplification of small quantities of DNA from *Pasteuria penetrans* endospores**

TIM MAUCLINE, SHARAD MOHAN, KEITH G DAVIES, BRIAN KERRY & PENNY R HIRSCH (Rothamsted Research, Harpenden, UK)

12.15 ANNUAL GENERAL MEETING AND ANY OTHER BUSINESS

12.20 LUNCH AND POSTERS

Session 2

Chair : PAT HAYDOCK (Harper Adams University College, Newport, Shropshire, UK)

14.00 *Invited Speaker*

Novel industrial approach towards nematode control

BRIGITTE SLAATS (Syngenta, Stein, Switzerland)

14.30 **Growth of sugar beet cyst nematode-tolerant sugar beets in infested soil**

ANDREAS WESTPHAL & MATTHIAS DAUB (Julius Kuhn-Institute, Munster, Germany)

14.45 **Identification and mapping of potato cyst nematodes in Cyprus using molecular tools and geographical information systems**

MICHALAKIS CHRISTOFOROU, D TSALTAS (Cyprus University of Technology, Limasol, Cyprus) L PAPAGIANNIS, (Agricultural Research Institute, Cyprus), G NEOPHYTOU, P FELLAS (Ministry of Agriculture, Cyprus) & N IOANNOU (Cyprus University of Technology, Limasol, Cyprus)

15.00 **Effects of plant extracts on *Globodera pallida***

WISEBORN DANQUAH, PATRICK HAYDOCK, MATTHEW BACK, IVAN GROVE (Harper Adams University College, Newport, Shropshire, UK), IAN ELLIOTT (Omex Agriculture Ltd) & MURRAY SMEDLEY (Barkwith Associates Ltd)

15.15 **Effect of green manure crops on hatching of the potato cyst nematode *Globodera rostochiensis***

YIRINA VALDES VAZQUEZ, NICOLE VIAENE & MAURICE MOENS (Institute of Agricultural and Fisheries Research (ILVO), Merelbeke, Belgium)

15.30 TEA AND POSTERS

Signalling and behaviour of potato cyst nematode in the rhizosphere of the trap crop *Solanum sisymbriifolium*

AYANO SASAKI-CRAWLEY, ROSANE CURTIS, MICHAEL BIRKETT, STEPHEN POWERS (Rothamsted Research, Harpenden, UK), ANDY BARKER (Branston Ltd, Lincoln, UK), JOHN PICKETT (Rothamsted Research, UK), ROD BLACKSHAW (The University of Plymouth, UK) & BRIAN KERRY (Rothamsted Research, Rothamsted, UK)

Cyst nematodes - a potential threat to oilseed rape production in the UK

STEPHEN KAKAIRE, PATRICK HAYDOCK & IVAN GROVE (Harper Adams University College, UK)

Interactions between the omnivorous bug *Orius laevigatus* and the entomopathogenic nematode *Steinernema feltiae*, natural enemies of the Western flower thrips, *Frankliniella occidentalis*

BISHNU KUMARI BHANDARI (Dorotheen Stabe, Hannover, Germany)

Image analysis of movement of *Meloidogyne* sp. encumbered with *Pasteuria penetrans* spores and modelling attachment in different substrates

IOANNIS VAGELAS (Technological Education Institute of Larissa, Larissa, Greece), BARBARA PEMBROKE & SIMON GOWEN (University of Reading, UK)

Session 3

Chair : ROMA GWYNN (Rationale Biopesticide Consultants, Duns, UK)

16.00 **Race structure of *Ditylenchus dipsaci* and its implication on field management**

NATALIA STAWNIAK, AMANDA COTTAGE (NIAB, Cambridge, UK), DAVID KENYON (Science and Advice for Scottish Agriculture, Edinburgh, UK), JANE THOMAS (NIAB, Cambridge, UK), SIMON GOWEN & BARBARA PEMBROKE (Reading University, UK)

- 16.15 **Entomopathogenic nematodes in Tanzania**
SOLVEIG HAUKELAND (Bioforsk, Norwegian Institute for Agriculture & Environmental Research, Norway), SUMA MWAITULO (Sokoine University of Agriculture, Morogoro, Tanzania), ANNE LAUDISOIT (VAR , Brussels, Belgium) MAI-GURI SAETHRE (Bioforsk, Norwegian Institute for Agriculture & Environmental Research, Norway) & AMON MAERERE (Sokoine University of Agriculture, Morogoro, Tanzania)
- 6.30 **Pathogenic virulence of the symbiotic bacteria *Xenorhabdus bovienii* and *Photorhabdus luminescens* from entomopathogenic nematodes against *Galleria mellonella* larvae**
ALI RAHOO, TARIQ MUKHTAR, SIMON R GOWEN & BARBARA PEMBROKE (University of Reading, UK)
- 16.45 **Community structure and sentinels: observing the effects of heavy metals on nematodes**
VAN THANH NGUYEN, EILEEN KELLY & THOMAS KAKOULI-DUARTE Department of Science and Health, Carlow, Ireland)
- 17.00 **Control of the subterranean termite (*Odontotermes* spp.) pests using a novel entomopathogenic nematode baiting technique**
SHARAD MOHAN, ANJU KAMRA (Rothamsted Research, Harpenden, UK), JITENDRA KUMAR & H S GAUR (Indian Agricultural Research Institute, New Delhi, India)
- 17.15 PRESENTATION OF STUDENT PRIZE
- 17.20 CONCLUDING REMARKS
- 17.25 CLOSE