

Biopesticide Application Workshop

PROVISIONAL PROGRAMME (BASIS Points have been applied for)

Workshop Convenors: Dr. Roy Bateman & Prof. Denis Wright

Objectives

There is an enormous literature on biopesticides dating back to the 1970 and beyond, but apart from *Bacillus thuringiensis*, this work has had relatively little impact on the pesticide market. With increasing public interest in the environment and food safety many now see opportunities in implementing biological controls in crop protection programmes, including the use of beneficial microbial control agents, including entomopathogenic nematodes (MCAs). However, some of the constraints that have dogged successful implementation of MCAs remain, including appropriate delivery systems (formulation, packaging, application, *etc.*).

This workshop has been developed for practitioners to address some of the delivery system issues, and to help participants to understand the “laboratory to field to marketplace” issues that are so crucial to successful implementation. Specifically we aim to:

- ◆ Introduce biologists to spray application issues
- ◆ Examine fate of agents from spray tank to target site
- ◆ Explore issues of scale-up from laboratory to field experiments
- ◆ See biopesticides from a growers point of view
- ◆ Provide an overview of other delivery systems: seed coating, drenches, irrigation, *etc.*

The International Pesticide Application Research Centre (IPARC) has provided a service to the pest control community for 50 years, focusing on application methods for farmers, nozzle manufacturers and regulators. Its unique facilities (see: <http://www.iparc.org>) enable us to carry out research and training on techniques for incorporating biopesticides in pest management strategies. The workshop will make full use of these resources.

Wednesday 28 September

Registration - Buffet Lunch available from 1200h

13.00 – 15.00 *Session 1*

Assessment of participants' needs

Overview of equipment available for biopesticide developers

What can farmers and growers reasonably be expected to accept?

15.00 – 15.30 Coffee

15.30 – 17.30 *Session 2*

Sprayers and Nozzles: their performance and measurement

Particles and droplet size spectra

General Discussion

18.00 Dinner (Accommodation will be at the Silwood Park campus if required)

Thursday 29 September

08.00 Breakfast

09.00 – 11.00 *Session 3*

Delivering EPNs in sprays: practical exercises (4 groups)

Drenches, seed coating and targeted delivery systems

Demonstration of chemigation equipment for EPN delivery

Soil injection

11.00 – 11.30 Coffee

11.30 – 13.00 *Session 4*

Participatory, practical workshop specifically addressing participants' enquiries: measurements of nozzle spectra, formulation issues *etc.*

Maintaining the network of researchers interested in biopesticide application.

13.00 – 14.00 Lunch

14.00 – 16.00 *Session 4 continued*

Continuation of participatory activities and discussion.

Coffee and end of workshop.

Participants should be prepared to take an active role in this practical workshop.