



AAAI Locust and grasshopper training courses

The Association of Applied Acridologists International offers the following training options in biocontrol, integrated management, and safe application of pesticides for locust and grasshopper control. Please contact AAAI for current schedules, costs and locations of courses. Courses can be modified according to requirements.

The full course is intended as a 'refresher' course, to enable experienced locust control officers to update their knowledge in modern integrated approaches to locust control. In particular, the course offers opportunities to learn about the monitoring of the environmental impact of control operations, and how to minimise such impact through the use of accurate and timely application of the most appropriate pesticide or biological control options. The course is flexible and modular, and course components can readily be combined with existing training programmes to provide a complete and all-round introduction to locust and grasshopper control.

6 modules (each 1 week*)

1. Application of ULV pesticides
2. Environmental monitoring of locust and grasshopper control treatments
3. Application and monitoring of Metarhizium
4. Collection of biocontrol agents and biopesticide development
5. Conservation biocontrol, selective treatment (including RAATS)
6. General acridology and locust control

1. Application of ULV pesticides

This module covers the use and application of ULV formulations of pesticides and Controlled Droplet Application (CDA). CDA enables a higher work-rate than conventional pesticide application, and is in widespread use for locust control operations. The novel fungal biopesticide Green Muscle is formulated for application by CDA, and this course is essential for the application of this biopesticide.

Resource persons: R. Bateman (CABI), H. Wilps (GTZ/FAO), H. Dobson (NRI), D. Brown (PPRI)

Theoretical aspects

Measuring droplet size

Calibrating ULV sprayers (hand, vehicle-mounted, aerial)

Practical application, monitoring coverage

2. Environmental monitoring of locust and grasshopper control treatments

A growing awareness of the potential damage to the environment caused by locust and grasshopper control treatments is making it essential for all locust control organisations to have the capacity to monitor the impact of their control operations.

Resource persons: R. Peveling, I. Stolz, J. Langewald, C. Tingle, P. Spurgin, J. Everts, W. Mullié

Theoretical aspects

Binomial sampling

Base-line data collection, selection of indicators

Realistic sample collection schemes

Data analysis

Human Safety of new compounds and/or techniques

Up-date on Environmental Fate and Behaviour evaluation techniques

Toxicology and Ecotoxicology
Risk Assessment
New Biomonitoring Techniques
Testing vs Monitoring ;
Ecotoxicology of Locust Control of Grasshopper Control.

3. Application and monitoring of Metarhizium

The recently developed Green Muscle and Green Guard formulations of Metarhizium are now available commercially. The products are formulated for ULV application and can be applied by applicators trained in this technique. However, the formulation is a living biological entity, and as such requires some care in handling and application. Also, because its impact is much slower than that of a chemical pesticides, special monitoring techniques are needed.

Resource persons: J. Langewald, C. Lomer, R. Bateman, R. Milner, D. Moore, B. Maghalaes, D. Hunter

Storage (germination test)
Formulation
Application (or see Module 1)
Monitoring (cage samples, field counts, sporulation tests)

4. Collection of biocontrol agents and biopesticide development

Although Green Muscle is available for use in many parts of the world, some countries may wish to enhance their capacity in the study and collection of biocontrol agents, with a long-term view of developing their own biopesticide.

Resource persons: C. Lomer, D. Johnson, D. Moore, C. Lange, J. Langewald, B. Maghalaes, R. Milner

Theoretical aspects of insect pathology
Sample collection
Sample preservation, storage and characterisation
Identification of insect pathogens
Bioassays
Steps involved in biopesticide development

5. Conservation Biological Control, selective treatments

Much has been done in recent years to try to minimise the impact of chemical pesticide treatments on non-targets. Methods include choosing selective pesticides, reducing the area treated (strips and bands), using selective formulations, such as baits. The course covers the rationale behind such concepts, (methods for monitoring non-targets are included in module 2), and methods of application.

Resource persons: J. Lockwood, N. Foster, D. Johnson, H. Dobson

Selection of pesticides to minimize impact on natural enemies and non-target organisms (focus on ecological service providers)
Reduced Area Treatments (RAATS), barrier treatments
Environmental impact evaluation

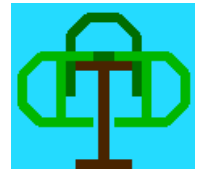
6. General acridology

AAAI members are available to participate in fuller courses designed to complement the specialised courses mentioned above.

Monitoring, GIS, identification, population dynamics,.....

Resource persons G. Sergeev, M. Lecoq, A. Latchininsky, Mohamed Ould Babah, Mohammad Mohsin, Le Kang, Igor Sokolov, D. Hunter, J. Everts.....

* owing to synergies and overlaps between courses, the full course of six modules can be completed in one month



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Application form - preliminary enquiry
Please complete and return by fax to:
Chris Lomer (+45) 3528 2670
Or Jeff Lockwood (+01) 307 766 5025

Number of participants: _____

Place: _____

Timing: _____

Modules required: _____

Name: _____

Address: _____
