

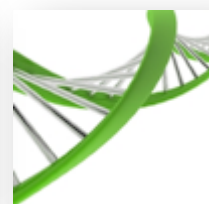
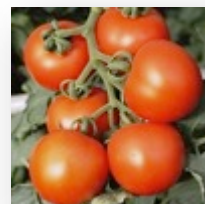
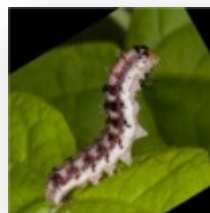


Insecticide Resistance Action Committee

Lepidoptera Working Group

Jim Dripps, Chair

Ralf Nauen, Vice-chair



Lepidoptera Working Group Members

Eric Andersen, *Cheminova* (Denmark)

Andrea Bassi, *DuPont* (Italy)

Ben Bolton, *Nufarm* (UK)

Jim Dripps, *Dow AgroSciences* (USA)
Chair

Werner Heck, *BASF* (Germany)

Sybille Lamprecht, *Bayer CropScience*
(Germany)

Ralf Nauen, *Bayer CropScience*
(Germany), Vice-chair

Alan Porter, *IRAC* (United Kingdom)
ad hoc

David Rogers, *BASF* (USA)

Celine Roux, *Makhteshim Agan*
(France)

Robert Senn, *Syngenta* (Switzerland)

Jorge Solis, *Makhteshim Agan* (USA)

Luis Teixeira, *DuPont* (USA)

Harvey Yoshida, *Dow AgroSciences*
(USA)

Lepidoptera Working Group

2013 Goals and Objectives

1. Increase awareness of Lep pest resistance issues and recommended resistance management practices globally

- **Expand web-based information on Lep pest resistance issues and resistance management**
 - Identify Lep pest species with the most significant IRM needs globally.
 - Ensure that each of these species has a 'Pest Page' on the IRAC website with key IRM tactics listed; review existing pages and develop/solicit content for new pages.

Lepidoptera Working Group

2013 Goals and Objectives

1. Increase awareness of Lep pest resistance issues and recommended resistance management practices globally

– Increase educational materials for Lep pest IRM

- Create posters for high priority Lep pests, update existing posters as needed.
 - Update MoA table, final approval and posting of *Cydia pomonella* poster.
 - Final approval and posting of *Lobesia botrana* poster.
 - Finish *Spodoptera frugiperda* poster.
 - Draft general Asian rice stemborer (*S. incertulas*, *C. suppressalis*) IRM poster.
 - Draft general Lep IRM/windows poster.
 - Update *Cydia pomonella* poster, include graphic to emphasize “generation window” concept.
- Review all posters to ensure consistent IRM message

Lepidoptera Working Group

2013 Goals and Objectives

2. Increase influence of Lep WG on other IRAC WGs and CGs and on IRM efforts of member companies

– Increase impact of Lep WG through outreach activities

- Work with CGs to determine which Lep WG materials should be translated into local languages.
 - Work with IRAC Brazil CG to draft a soybean lep pest IRM poster, with focus on *Helicoverpa armigera*.
- Seek opportunities to represent IRAC and the Lep WG at relevant international and national meetings related to Lep pest management.
- Develop plan to leverage Philippines ‘train-the-trainer’ materials and replicate training in other countries.

Lepidoptera Working Group

2013 Goals and Objectives

2. Increase influence of Lep WG on other IRAC WGs and CGs and on IRM efforts of member companies

- **Achieve the planned merger of the Diamide WG and Lep WG in 2014**
 - Support opening of Diamide CGs to other companies and support the transition of Diamide CGs to general IRM CGs
 - Increase exchange of information and joint review of materials with Diamide WG and other WGs and CGs,
- **Promote common IRM recommendations on Lep pest insecticide product labels and common bioassays for resistance monitoring**
 - Share existing IRM label statements across member companies,
 - Review diamide IRM label statements and identify elements that can be recommended across all new product labels.

Lepidoptera Working Group

- Overview of 2013

- WG membership was relatively stable in 2013.
 - *15 members throughout 2012, 14 members in 2013.*
 - *Change in representatives from Makhteshim Agan and Nufarm.*
- Linkage between Lep WG and Diamide WG continued to increase.
- Progress against goals and objectives was limited.
 - *Goals and objective were probably too ambitious.*
 - *Insufficient time and focus from WG chair.*

Lepidoptera Working Group

- Accomplishments
 - *Cydia pomonella* poster completed
 - Unmet Lep pest IRM needs identified
- On-going/in progress activities
 - *Spodoptera frugiperda* (fall armyworm) poster
 - *Lobesia botrana* poster

Lepidoptera Working Group

- Identify unmet IRM needs for lepidopterous pests.
 - *Risk in shorter term*
 - Brazil / Soybean looper / soybean
 - Brazil / *Helicoverpa zea* / cotton, soybean, corn
 - China / Striped stemborer / rice
 - Indonesia / Yellow stemborer / rice
 - Vietnam / Rice leaf-folder / rice
 - Japan / Diamondback moth / brassica vegetables
 - Japan/Tea tortrix/tea
 - *Risk in longer term*
 - Brazil/lep pests/GMO crops
 - India/Stemborers/rice

Lepidoptera Working Group

- Overview of 2013
 - Challenges
 - *We experimented with having fewer (1 per quarter) and longer (2 hours) meetings.*
 - Getting meetings scheduled proved challenging.
 - More frequent meetings is a better approach.

Lepidoptera Working Group

- Proposed themes for developing 2014 Goals and Objectives
 - Achieving merger of Diamide and Lep Working Groups.
 - Defining the focus of the new Lepidoptera WG
 - *IRM Label language guidelines*
 - *Lepidoptera in rice*
 - *Lepidoptera in Brazil*
 - *Most effective educational tools.*

Lepidoptera Working Group

- Thank you
 - Lep WG team members for their efforts in 2013.
 - Alan Porter for ongoing support.
 - Organizers and hosts of the 2014 Annual Meeting.