

# **Methods Working Group**

Tatjana Sikuljak March, 2013





### **Methods WG Members**

- Tatjana Sikuljak, BASF (Interim Chair)
- □ Harald Koehler, Bayer Crop Science (Vice Chair)
- Magali Gravouil, DuPont
- Lixin Mao, BASF
- □ Frank Wessels, Dow AgroSciences
- ?, Syngenta (Russell Slater, interim member)

## **Team Goals**

### <u>Team Goals:</u>

- Develop a single point of contact for researchers to gain information on how to conduct insecticide resistance bioassays.
- To provide IRAC approved methods in order to steer researchers to use these validated methods, so that data generated by independent researchers can be compared directly.

#### What are we doing to meet these goals:

- Constant update of a searchable database for finding both IRAC approved methods and those which are used by researchers but have not been approved by IRAC.
- Increasing diversity and rate of validation of IRAC approved methods, including public health pests.
- Aid in better understanding of confirmed methods by providing additional visual tools e.g. methods videos

### eMethods Status

#### Number of approved methods: 29 (26 in 2012)

- Latest methods confirmed:
  - Pollen beetle (indoxacarb)
  - 2 stinkbug methods (topical and leaf dip bioassay)

#### Current methods activities:

- Colorado potato beetle drafted and currently being reviewed
- Diamides:
  - Rice stemborer, rice leaffolder drafted, currently being reviewed
  - Whitefly drafter and reviewed. Will be finalized soon.
  - Liriomyza drafted
- Bedbugs (deltamethrin) to be confirmed by Syngenta

#### 158 posted references cover:

- Broad range of crop pests (aphids, thrips, cutworms, stinkbugs, leafminers, scales, mealybugs, weevils, flea beetles, wireworms and planthoppers), also
- A number of public health pests (house fly and mosquitoes)

### eVideo Status

### Methods video completed in 2012:

- Nilaparvata lugens (suitable for all MOAs)

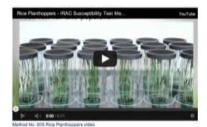
#### Additional video facts:



Aphids - Test Method No. 019 From: December 2011 Viewings = 543



Tuta absoluta - Test Method No. 022 From: December 2011 Viewings = 718



Rice Planthoppers - Test Method No. 005 From: November 2012 Viewings = 95

- Method videos suggested to 2013:
  - *Meligethes sp*. (filming in preparation)
  - Tetranychus sp. or Panonychus sp.

## Goals & SMART Objectives 2013/2014

Goals	Objectives	Timeline
Develop single point of contact for insecticide and acaricide resistance monitoring methods (core activities)	<ul> <li>Populate e-methods tool with a range of methods used to measure insecticide susceptibility against key agricultural, horticultural and public health pests. Methods sourced from literature, companies and external contacts.</li> <li>Continue to maintain and improve confirmed methods e.g. indicate suitability of each confirmed method for base line determination in the method description, review older IRAC approved methods</li> <li>Populate e-methods with additional references</li> </ul>	Q4 2013/ Q1, 2014
Develop single point of contact for insecticide and acaricide resistance monitoring methods (promotional activities)	<ul> <li>Promote eMethods tool through e-connection, posters and videos to be used at industry and academia events, and publications (e.g. Journal of Economic Entomology – forum section)</li> <li>Initiate minimum 1 new procedural videos e.g. pollen beetle or mites</li> </ul>	Q4, 2013 Q4 2013/ Q1 2014
To provide IRAC approved methods in order to steer researchers to use these validated methods, so that data generated by independent researchers can be compared directly	<ul> <li>Deliver minimum 3 new crop IRAC approved methods</li> <li>If needed confirm public health methods for inclusion in the IRAC methods series.</li> <li>Liaise with Biotech Team to deliver Biotech SOPs.</li> </ul>	Q4 2013 Q4 2013 Q4 2013