

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)

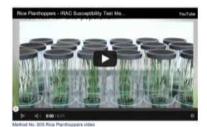
Additional video facts:



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)	 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. 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 Populate e-methods with additional references 	Q4 2013/ Q1, 2014
Develop single point of contact for insecticide and acaricide resistance monitoring methods (promotional activities)	 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) Initiate minimum 1 new procedural videos e.g. pollen beetle or mites 	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	 Deliver minimum 3 new crop IRAC approved methods If needed confirm public health methods for inclusion in the IRAC methods series. Liaise with Biotech Team to deliver Biotech SOPs. 	Q4 2013 Q4 2013 Q4 2013