

2013 ESA-SME: Second Quarter Report: USEPA Liaison Activities

ESA's Subject Matter Expert to the USEPA: 2013 Report 2

By Mark Whalon, April 26, 2013

ESA's Subject Matter Expert Liaison: USEPA Office of Pesticide Programs (OPP) 2013 – USEPA & industry's Insecticide Resistance Action Team (IRAC) AM Meeting 4/16/13 in Washington DC & subsequent USEPA Meetings 4/16/13 PM and 4/17/13 AM for the Entomology Society of America

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Reporting: USEPA and other interaction and activities of ESA's Subject Matter Expert.

The Insecticide Resistance Action Committee (IRAC) (<http://www.irc-online.org/>) and USEPA moved toward a broader understanding of USEPA's Pesticide Resistance Management Terminology at a joint meeting in Washington DC on April 16, 2013. The meeting was convened at Syngenta Headquarters in Wash. DC by Caydee Savinelli (Syngenta: Technical Product Lead, Insecticides) attended in person or phone by more than 20 additional industry representatives, three USEPA personnel ('Skee' (Arnet) Jones, Bill Chism (both from the Bio. & Ecological Analysis Division (BEAD)) and Clayton Myers (Registration Div., Insecticides), and two Subject Matter Experts representing the Weed Science Society of America (Jill Schroeder) and the Entomology Society of America (Mark Whalon).

USEPA is seeking a 'common framework' and suggestions for 'best practice' in resistance management terminology as these definitions must be a clear and consistent communication function on pesticide labels. Essentially, the Agency would like clarification on what resistance terms like 'cross-resistance' or 'field-resistance' actually mean scientifically and how these definitions related to actual resistance management in the field. Practically, the Agency is moving to secure an expert 'vetted' resistance terminology for use on pesticide labels. They would like a relatively uniform set of definitions where possible, even across disciplines. Therefore, resistance terminology is currently being addressed in the pesticide industries, academia, among grower groups and within the Agency itself. Obviously, clarification and some degree of harmonization of these terms would provide more consistent and effective label communication and may actually improve resistance management in the field.

Therefore, last month the SME's to USEPA made several appeals through the ESA's Web page and through personal list-serves asking members to 'weigh in' on a list of Resistance Terms. (If you would like to see the Terminology List, just email me at whalon@msu.edu.) To-date, we have received over 30 emails with suggestions, and some of these efforts particularly from B.

Tabashnik, Y. Carriere, B. Hollingworth, D. Mota-Sanchez, G. Bird, D. Smitley, C. DiFonzo, B. Siegfried, E. Grafius, T. Miller, K. Stevenson, D. Brassard and J. Schroeder have been particularly helpful. Thanks to all for your timely help!

On the reporting and recording pesticide resistance front, USDA and IRAC have both continued to support the Michigan State University, Arthropod Resistance Database (R-Dbase) (<http://www.pesticideresistance.com/>). USDA and IRAC are the most faithful users of this database, and both have helped finance the R-Dbase's 24 year history. The database itself was written in SQL (Standard English Query Language) and is currently undergoing a significant software update, both in content and products offered. The R-Dbase is free and is used globally with more than 100,000 visits lasting longer than 7 minutes and more than 26,000 inquiries lasting longer than 20 minutes. Personally, I can find almost anything I need in the database in less than 5 minutes; therefore, a good number of these visitors are seriously extracting information from this international resistance reference source. Not surprisingly, the two most frequent users on the database are the USEPA and industry itself. If you have not, then you should visit the R-Dbase and scope its improvements and utilities for your research, teaching or extension programming.

While in DC for the IRAC/EPA Resistance Terminology meeting, I also visited with EPA staff on issues surrounding flonicamid 9c (IUPAC: *N*-cyanomethyl-4-(trifluoromethyl) a nicotinamide with efficacy on aphids, whiteflies, plant bugs, plant hoppers and scale insects.

I also met with Meredith Laws (EPA's Registration Division Branch Chief), to discuss and provide feedback on neonicotinoids bees and birds. Essentially, the pressure created by the press and public concerns over pesticide impacts on pollinators and birds has escalated to a level approaching some of the Food Quality Protection Act days when EPA staff were so harried and absorbed by the communications burdens that it was hard to accomplish anything at times!

With major press coverage continuing and intensifying; public attention from personalities like Dan Rather CBS News, the Pollinator Defense Fund, Bloomberg BusinessWeek, the Weather Channel, and the American Bird Conservancy all seeking in-depth information and targeting USEPA's management people to address bird/bat/bee issues all together. Moreover, with pesticide regulators all of this media attention is not helping staff duck Z-Space Bloggers and individual letters from concerned citizens either. All of this can too often be a wearying distraction and the gradually increasing pressure-cooker can obviously delay and decouple Agency productivity. It is probably an appropriate insight for all of us in the entomological sciences to note just how much media attention the USEPA attracts—like a steel pole in the middle of a lighting storm!

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