
IR-4 and Section 18's: High Value Work Behind the Scenes

During the past five years, IR-4's efficiencies and successes have increased to all time highs - more tolerances (maximum allowable residue levels) for reduced risk chemicals, more ornamental registrations and biopesticide clearances for minor crops than ever before. Each IR-4 success is immediately converted into advantages for American agriculture - meeting critical pest control needs as safely and efficiently as possible. But there's another component to IR-4's work that is just as valuable but not well known: if you are a state in need of a minor crop Section 18 emergency exemption for which you need residue tolerance data, "who you gonna call?" IR-4 has been providing residue data for EPA to expedite Section 18's over the years and since 1998 has saved American agriculture in excess of 2.2 billion dollars in the process.

Section 18 emergency exemptions allow states to use a registered pesticide for an unregistered use if the EPA determines that emergency conditions exist. The state provides information and data to EPA on how and where the pesticide will be used, data about residue levels, health and environmental risks, and economic impact if the current pest situation goes untreated. In turn, EPA assesses the dietary, occupational and environmental risks, the emergency situation, and reviews the progress toward registration for the use in question. Within 50 days, EPA makes a decision to either grant or deny the specific exemption request. In 1996 the Food Quality Protection Act (FQPA) added to the process by requiring EPA to establish formal time-limited tolerances or tolerance exemptions for all residues resulting from Section 18 uses on food and animal feed.

For the years 1998-2000, IR-4 contributed data to about 30% of all the Section 18's issued by EPA. The economic impact value for that 30% amounts to over 2.2 billion dollars in losses averted thanks to the use of IR-4 residue data. The final figure was compiled from the economic impact portion of each state's Section 18 request. Two billion dollars is a huge amount of money. It represents value added for American agriculture, value added to the accomplishments of the IR-4 Project and value added to the hard work of EPA's Registration Division who issue more Section 18's every year and turn them around faster each year.

The following statistics have been gleaned from the summary tables of 1998-2000 Section 18's that utilized IR-4 data.

- Of 44 states, the states utilizing IR-4 data the most were Washington (44), Oregon (39), California (37) and Idaho (35).
- Minor crop Section 18 requests were greatest for: tebuconazole (44), clopyralid (28), imidacloprid (26), myclobutanil (24), azoxystrobin (21) and metolachlor (21).
- The estimated potential losses without the use of the Section 18 pesticide/biopesticide: 1998 - \$413 million, 1999 - \$877 million, 2000 - \$1 billion.

If you would like more information, please contact the IR-4 National Outreach Specialist, Sandy Perry, perrys@msue.msu.edu.

The EPA/IR-4 Technical Working Group Meeting

The EPA/IR-4 Technical Working Group (TWG) has convened for a series of meetings between the IR-4 Headquarters staff and key scientists from the Environmental Protection Agency (EPA), California Department of Pesticide Regulation and Canada to produce a more efficient system of IR-4 data submission and review. These meetings have been held at approximately quarterly intervals, generally at the offices of IR-4 or EPA.

A TWG meeting was held on October 2, 2001, in Arlington, Virginia. Participants from the EPA included Hoyt Jamerson, Peter Caulkins, Jim Jones, Sidney Jackson, Shaja Brothers, Jeff Herndon, Bernie Schneider, Mark Dow, Will Donovan, John Redden, Pat Cimino, Luis Suguyama, Steve Robbins, and Kathleen Knox. Additional participants from outside IR-4 Headquarters who participated by telephone included Rebecca Sisco (IR-4 Western Region), Sandy Perry (IR-4 National Outreach Specialist), Craig Hunter and Shirley Archambault (Canada), and Tom Leffingwell, Jerry Campbell, Keith Pfeiffer, David Supkoff, and Roberta Firoved (California Dept. of Pesticide Regulation (Cal DPR)).

Jeff Herndon reported that Margaret Stasikowski has signed a letter of approval for the use of the Residue Chemistry DER (data evaluation record) to summarize residue data that have been submitted to EPA. Contract reviewers are already using this format, and IR-4 will soon integrate it into petitions.

Shaja Brothers distributed the completed Quick Guide to EPA's Pesticide Programs on the Internet. This was posted on the IR-4 website. Bernie Schneider discussed the EPA Reviewers' Guide for crop groups, which includes new commodity definitions and has been approved by EPA HED Chemistry Science Advisory

Council. Mark Dow indicated his approval of the table of pesticide application information that will soon be included in IR-4 petitions. Some additional fine tuning will be needed before its implementation, based on the discussion at this meeting. Dan Kunkel described a study underway to determine the effect of rainfall on residues of certain pesticides that have been applied to the crop foliage. If rainfall is determined to be a more important predictor of residues than geographical location, then the requirements for field trial location could be changed.

The IR-4 Project received its own plaque commemorating the EPA-OPP Award for Excellence on Team Work. The original plaque that had been presented to IR-4 had been passed on to Cal DPR, another co-winner. Additional plaques will be made for PMRA (Canada) and EPA. The EPA workplans for fiscal years 2001 and 2002 were updated. The California participants discussed the progress of their workshare of IR-4 petition reviews, and announced the imminent retirement of Chief Chemist Tom Leffingwell. The group wished him well in his retirement and that we will miss him. Status reports were also presented for the EPA Registration Division ARIA Team and the Canadian IR-4 research program. Pat Cimino handed out copies of the EPA Report on Minor Use Pesticides.

John Redden provided an update on the activities of the Registration Division Alternatives Risk Integration Assessment Team, and Kathleen Knox discussed the activities of the Biopesticide and Pollution Prevention Division (BPPD).

The next TWG meeting is scheduled for Wednesday, January 30, 2002.

Article by Ken Samoil