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## New Technology Team Report

The New Technology Team (NTT) is focusing the majority of its efficacy research efforts in 2000 on screening new herbicides for cucurbit crops and spinach. The NTT is concerned that these crops are extremely vulnerable to the loss of few remaining weed control options that are currently registered. The research program will consist of ten sites throughout the United States. Research will be conducted in California, Florida, New Jersey, Michigan, New York, North Carolina, Oregon, South Carolina, Tennessee, and Wisconsin. Each site will operate under the same research plan. It is hoped that the results of this research will allow IR-4 to receive the acceptance from the cooperating registrants to proceed with magnitude of the residue studies that ultimately lead to registrations. For a complete copy of the research protocols or further information contact Marija Arsenovic (arsenovic@aesop.rutgers.edu).

In addition to the above, the NTT is also piloting a data mining project. The Team has retained the service of Margaret Reiff, former IR-4 Western Region Project Manager, to carry out this project. Briefly, she will be responsible for contacting researchers to obtain crop safety/product performance data on minor crops. She will also be responsible for

checking publications and other sources outside the “normal” IR-4 network to obtain this data. She will summarize information in a database as well as conduct an economic analysis of the usefulness of data mining vs. developing new data. Please contact Ms. Reiff for details of the project. For details of the work plan or if you have data that you would like to provide please contact Margaret Reiff at (margir4@calweb.com).

Now that winter is over and everyone’s year 2000 planting season is moving into high gear, plans for IR-4’s 2001 season are starting to be formulated. Meetings are being scheduled with registrants to better learn about potential opportunities for new pest control technology. The information gained in these meetings will be provided at the IR-4 Food Use Workshop, September 12-14 in Orlando FL (see notice of Workshop on page 34 ).

Finally, the New Technology Team is pleased to announce that USDA Minor Use Coordinator, Dr. Paul Schwartz, and IR-4 Southern Region Field Coordinator, Dr. Charles Meister, have joined the Team.

Article by Jerry Baron

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## The EPA/IR-4 Technical Working Group

The most recent of a series of meetings between the IR-4 Headquarters staff and key scientists from the Environmental Protection Agency (EPA), intended to produce a more efficient system of IR-4 data submission and EPA review, were held on 3 February and 28 March, 2000, at EPA. The February meeting had been originally scheduled for 25 January, but was postponed because of the winter storm that occurred on that date. Participants from the EPA on the 3rd included Shaja Brothers, Pat Cimino, Will Donovan, Jeff Herndon, Sidney Jackson, Hoyt Jamerson, Jim Jones, Rick Keigwin, and Bernie Schneider,. Additional participants included James Parochetti (USDA-CSREES), Willis Wheeler (IR-4 Liaison to OPP/EPA), Doug Rothwell (by telephone from Health Canada) and J. Campbell (by telephone from California DPR).

The agenda included a discussion of the FY 2000 workplan. Specifically discussed were the studies that IR-4 is initiating in 2000, the petitions that IR-4 plans to submit during the next 12 months, and a report from Canada on IR-4/PMRA cooperative review projects. A meeting held between IR-4 personnel and California Dept. of Pesticide Regulation (Cal-DPR) personnel was reviewed; IR-4 has agreed to consult with Cal-DPR regarding reduced data requirements for “safer” pesticides on crops that are important in California.

Several new crop definition or group proposals were discussed. New residue data requirements are under consid-

eration for turnip greens, cilantro, and pistachio; none of the proposed changes have been finalized.

The group was brought up-to-date on the status of special projects begun at previous working group meetings, including studies involving spinosad, azoxystrobin, glyphosate, methyl bromide, and ant bait stations.

A proposal to grant non-food-use status to certain uses of the rodenticide zinc phosphide was not accepted at this time(except for perimeter treatments); EPA requested the submission of more information about these uses. New proposals for non-food-use classification were raised, including seed treatments and herbicides on lowbush blueberry fields.

The field tour planned for the day after the June Technical Working Group (TWG) meeting was previewed. The TWG personnel, along with some additional EPA and USDA personnel, plan to travel to the Delmarva peninsula to see beans in the field and at a processing site, then visit mushroom houses (specialty and Agaricus) north of Wilmington, Delaware.

During the course of the TWG meeting, IR-4 Study Director Ken Samoil left to attend a Chem-SAC meeting occurring in the same building. Ken had requested clarification of the data requirements for watercress treated with a systemic

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# The EPA/IR-4 Technical Working Group

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pesticide. The committee sent Ken a letter describing their final decision the following month. (Samples will be collected at each harvest during the growing season.)

Participants from the EPA at the 28 March meeting included Hoyt Jamerson, Bernie Schneider, Sidney Jackson, Jim Jones, Shaja Brothers, Will Donovan, and Rick Loranger. Additional participants included Willis Wheeler (IR-4 Liaison to OPP/EPA) and (via telephone conference call) Doug Rothwell (Health Canada), representatives from Cal-DPR, George Markle and Sandy Perry.

Dave Thompson and Bernie Schneider led a discussion of the processing procedures required for residue studies on grapes. Dan Kunkel, Rick Loranger, and Hoyt Jamerson discussed the possibility of establishing a non-food use or threshold-of-regulation for ethephon use on peaches. Ethephon is applied in late fall to delay bloom the following spring. Dave and Rick, along with Van Starner and Will Donovan, discussed the residue study requirements regarding post-harvest application techniques in stone fruit and pears (dip vs. ULV applications).

A discussion on the continued use of zinc phosphide on alfalfa in California (supported by Section 18 registrations) was postponed until further information could be obtained. EPA affirmed that IR-4 does not need to submit Monte Carlo analyses with its petitions proposing tolerances for pyrethroid insecticides. Bob Holm pinch-hit for Jack Norton, who could not attend this meeting, and updated the group on the status of the IR-4 methyl bromide alternatives program. Keith Dorschner raised the question, regarding the

imidacloprid-treated apple spheres for maggot fly control that he has been instrumental in moving towards registration, whether certain acute toxicology studies normally required by EPA could be waived for this product, given the known safety of the materials involved and the way that they'll be used.

Michael Braverman and Will Donovan led a discussion, later joined by Doug Rothwell, of the discrepancy in residue data requirements regarding the glyphosate-metabolite AMPA. (EPA does not require residue data on AMPA, Canada and Codex do.) A draft petition proposing a blanket tolerance for sethoxydim on fresh herbs, tropical fruit, and small fruit was discussed. Bernie Schneider then informed the group that turnip greens shall henceforth be a member of the Brassica leafy vegetables crop group rather than the leaves of root and tuber vegetables crop group.

The FY 2000 Workplan for IR-4 submissions was again reviewed, and the FY 2001 Workplan was unveiled. Doug Rothwell promised that requested data supporting the registration of deltamethrin, clethodim, and clopyralid on certain crops in Canada would soon be at IR-4 Headquarters to support similar registrations in the U.S. The Cal-DPR representatives said that they would send data on residues of DCPA on parsley to IR-4 so that a tolerance could be proposed.

The next meeting of the EPA/IR-4 Technical Working Group is scheduled for 6 June, 2000, the day before the "Beyond the Beltway" tour of agriculture in the Delmarva/southeastern Pennsylvania area.

Article by Ken Samoil

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## Herbicides for Medicinal Crops

The health benefits of fresh fruits and vegetables for the diet have been given a lot of press in the last few years. More recently there has been a dramatic increase in the use of herbs for medicinal purposes. In many situations these plants were harvested from the wild, such as with Echinacea. With increased demand, many of these medicinal herbs have become cultivated minor crops. Most of these crops do not have any registrations for weed control or other pest control measures. The registration of pest control tools would facilitate their production and ensure a constant supply of domestically grown plants. The successful cultivation of these crops is important to the environment because increased cultivation helps to preserve wild populations from over harvesting. Another factor is the need for a quality product for manufacturing purposes.

Under current regulations 40 CFR, Pt. 158 Appendix A, medicinal crops are considered terrestrial nonfood crops, so there is no need for GLP residue trials or even establishment of a tolerance. This is not the case for food crops (such as burdock) which may also have medicinal uses. Of course, a label for the registered compound still needs to be estab-

lished prior to use. Glyphosate (Roundup® Ultra) has recently received EPA approval for a number of medicinal crops, and we are awaiting state registrations for use of the label. Sethoxydim (Vantage® formulation, not Poast®) is currently labeled for use in medicinal crops (see label for specific crop listings). IR-4 has also received requests for use of pendimethalin and trifluralin in Echinacea. Thanks to the initiative of Al Sutherland of Oklahoma State University, he has provided efficacy data for needed herbicides in Echinacea (coneflower) production.

IR-4 is interested in learning about the needs of growers for medicinal crops. Essentially, if there are favorable product efficacy/phytotoxicity data, IR-4 can present this information to registrants for their consideration, and potential supplemental labeling. Even if you do not have efficacy data, IR-4 would be interested in collecting information concerning which medicinal crops are under cultivation. Help to preserve wild populations of medicinal plants by enabling growers to make cultivation of these minor crops practical.

Article by Michael Braverman