

## IR-4: Does It Work?

JOSE AMADOR

Plant Pathologist, Texas Agricultural Extension Service, Weslaco



Many of us in the daily practice of our profession are in dire need of chemicals to help us in our fight against plant pathogens. New fungicides have become available during the past few years—for example, Ridomil (metalaxyl), Aliette (fosetyl Al), Bayleton (triadimefon), Rovral (iprodione), and Tilt (propiconazole)—but because of the expense involved in developing and registering new compounds, chemical companies concentrate on obtaining label uses for crops grown on large acreages or for more than one crop.

During recent visits to the headquarters of two of the world's largest agrichemical companies, I was amazed to see the very small range of crops and disease organisms used as criteria of efficacy in the initial screening of a compound. If no activity is detected, testing is stopped. Economics dictates which crop and what use the company will pursue.

To fill the void, especially for crops on small acreages or for uses in limited areas, Interregional Research Project Number 4 (IR-4) was created several years ago. Under this program, headquartered at Rutgers University, experiment station, university, USDA, and other personnel collect residue and efficacy data required by the EPA for label uses that do not offer the economic-return incentive necessary to justify significant investments by companies. Numerous uses on small crops have since been cleared for insecticides, fungicides, nematocides, and herbicides—for example, Benlate (benomyl) on spinach, sweet potato, avocado, eggplant, and peppers and Nematicur (fenamiphos) on okra and raspberry.

Those who are intimately associated with the program or have benefited from it are enthusiastic supporters. Vegetable seed producers in the Pacific Northwest could point out that the continuity of their industry would have been in jeopardy had not the IR-4 program resulted in the use of Benlate as seed treatment to control blackleg (*Phoma lingam*). Similarly, ornamental growers could experience difficulties without assistance from IR-4 in obtaining numerous labels. Potato growers in southern Florida, on the other hand, have tried unsuccessfully for several years to obtain permission to use Benlate on potatoes to control Sclerotinia blight (*S. sclerotiorum*), a serious vine disease that drastically limits potato production in the Homestead area.

Many do not think IR-4 is working well. Funding was threatened this year with cancellation, and only last-minute negotiations kept the program in the federal budget. Being

without a program such as IR-4 would be chaotic. Many growers of small-acreage crops would have few or no products for controlling diseases, insects, and weeds and might be tempted to use products without labels.

Although improvement is certainly possible, the program has worked well. An indirect benefit is that plant pathologists have become involved in setting priorities and in the process have become aware of needs that might otherwise have gone undetected. Companies have been stimulated to initiate registration procedures, thus relieving IR-4 of the task (this negates the criticism that because of IR-4, companies do not pursue registrations they otherwise might).

Some may say that IR-4 does not try hard enough. All IR-4 can do is gather information—the EPA grants or does not grant use permits. If anything, I feel IR-4 tries to do too much. At our last workshop to set priorities on the requests for research, better than 85% of the 149 minor uses requested for fungicide clearances were ranked as having high priority. The insecticide and herbicide groups submitted similar numbers. To guarantee workable goals rather than “wish lists,” criteria should be more stringent and requesters should submit more documentation and information on economic impacts.

The perception that IR-4 cannot help may be directly related to the activities of the state contact person for the IR-4 program. Those in charge should evaluate the performance of the contact person and, when necessary, improve communications between the generators of requests and the producers who will ultimately be helped by the new labels.

Some may say that IR-4 has become too political. Staying apolitical may be unrealistic, however, when funding comes from public sources and one is dealing with experiment station, extension service, and USDA bureaucracies while sandwiched between chemical companies (which may or may not be interested in labeling their products) and the EPA (with its long list of strict requirements). “Do away with politics and deal only with the facts” is easy to say, but if use registration takes too long, whose fault is it? The researcher for not getting all the data? The company for not giving more assistance? IR-4 for not moving fast enough? The EPA for being indecisive and too demanding?

I may be emphasizing the positive, but if we approach the issue with a negative attitude, getting funding for the IR-4 program may become even tougher. Plant pathologists' jobs are made easier and more effective by the availability of good disease control chemicals, and they should ask what can be done to make IR-4 work better—not “does it work?” Perhaps IR-4 administrators should prepare a pamphlet for general circulation among plant pathologists and scientists in other disciplines, explaining how the program functions and what it can and cannot do, listing its major accomplishments, and requesting assistance from those in positions to help. That may keep many from asking, “IR-4: Does it work?”