

Section II
Bee Poisoning, Environmental Toxicology, Regulatory Issues

Interregional Research Project Number 4 (IR-4): Providing Pest Control Solutions for Minor Crops

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The IR-4 Project is the only public organization in the United States with the mission of expanding the quantity and range of crop protection solutions for growers of fruits, vegetables, and other specialty crops (the so-called minor crops). The project works with biopesticides as well as conventional pesticides. People who benefit from IR-4 are minor crops growers, food processors, and consumers.

IR-4 works from a priority list of pest control needs that come directly from growers, scientists, and commodity organizations. The project maintains a network of major field and laboratory research facilities associated with universities in four states, with satellite laboratory facilities and field research centers in many other states, including 11 federal locations. The results of IR-4 research are submitted to the U.S. Environmental Protection Agency (EPA) to gain safe residue tolerances for crop production uses on minor crops. Once a tolerance has been established, the pesticide may be labeled for use on the crop.

Over the past decade, the agrochemical industry has developed a range of new, safer products. These newer crop protection tools are much more selective against target pests, exhibit low human toxicity and have minimal impact on the environment. The EPA recognized this trend and created a classification of Reduced Risk for compounds that meet these strict criteria. IR-4 recognized these trends as well, and in its 1995 strategic plan focused on the new, Reduced Risk chemistries. When the Food Quality Protection Act (FQPA) was enacted in August of 1996, IR-4's strategy was already being implemented and in the subsequent six years over 70% of IR-4's program has focused on Reduced Risk or lower risk active ingredients.

As a means to accelerate the registration of newer reduced risk chemistries which may serve as organophosphate alternatives, IR-4 has as its goal a 30-month completion schedule on newly initiated, and high priority projects. IR-4 submits more than 100 petitions per year to EPA, requesting that new registrations be established for minor crops. A recent initiative of IR-4 is to develop residue data on new products at a much earlier stage. To maximize success in obtaining tolerances from the EPA, IR-4 is committed to identify new chemistries likely to be registered by industry and will develop parallel minor crop registration data to coincide with those from the

companies seeking EPA registration on major crops. The result of this initiative will be new registrations available for minor crops at the time of the initial registration for major crops.

Other initiatives that IR-4 has implemented include the IR-4/EPA Technical Working Group, which has resulted in hundreds of new registrations on minor crops via scheduling submissions and actively participating in the development of EPA's workplan. Reduced data sets or use of surrogate data support expanded registrations. The group also plays a major role in EPA's work share program with California's Department of Pesticide Regulation, where nearly thirty new minor use data packages are reviewed each year for EPA.