How Do Pesticides Get Registered for Specialty Crops and Minor Uses? Focus on “The IR-4 Project Minor Use Pesticide Program” at the University of Florida

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PESTICIDE REGISTRATIONS

Who?
• Since 1963 the IR-4 project has been helping specialty crops growers in Florida and around the nation solve their pest management issues. IR-4 is a federally funded cooperative unit whose mission is to “facilitate registration of sustainable pest management technology for specialty crops and minor uses.”

What?
• IR-4 receives requests for pesticide registrations on specialty crops and via it’s annual priority setting process, projects get selected with stakeholder involvement that translate into field residue studies across the US. Data from the residue trials are generated under US Environmental Protection Agency (EPA) mandated good laboratory practices (GLP) standards to support new tolerances and labeled product uses.

Why?
• Chemical companies that develop plant protection products (pesticides) usually focus their resources on major markets as the specialty crop market typically does not yield large scale financial returns due to the smaller market base. This results in a major void for specialty crop growers, as in order for a pesticide to be legally used in the US, its use must be registered or exempted by the US EPA as mandated by the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA). The IR-4 project fills this void. The reduced risk products that IR-4 works on are vitally important for IPM programs., making IR-4’s role increasingly critical for maintaining the efficient and competitive production of high value specialty crops.

REGULATORY CLEARANCE PROCESS

Top priorities researched

Requests Prioritized:

20 Priorities added as resources allow

Field and Lab Research:
• Measure Residue levels in Crop/Crop Group
• Top Priorities completed in 30 months

Data submitted to EPA

Risk Assessment

Tolerance Established by EPA

Manufacturer Adds Crop to the Product Label

UNIVERSITY OF FLORIDA’S ROLE

Locations
• IR-4 has a strong presence in FL maintains close ties with the UF. There are two dedicated ‘IR-4 Field Research Centers,’ located at the Plant Science Research and Education Center (PSREC) in Citra FL and the Tropical Research and Education Center (TREC) in Homestead FL. UF/IFAS faculty members Dr. Peter Dittmar and Dr. Jonathan Crane lead the respective programs. The IR-4 Southern region office works closely with numerous faculty and extension personnel from UF at the various research centers across the state. The IR-4 SOR program office is on main campus in Gainesville along with the SOR analytical chemistry laboratory.

Residue Field Program
• GLP residue field trials are conducted annually at UF, based on EPA commercial production areas. Upon trial completion, frozen residue samples are analyzed for residues and the results get compiled into petitions that are submitted to the US EPA to establish a tolerance for a particular chemical/commodity combination. Over the years, IR-4 has responded to over 750 requests from Florida for registration of pest management products for food crops.

IMPACT
• The program provides an essential service by enabling reduced risk pesticide registrations to control key insect, disease, and weed pests.