The Department of Environmental Horticulture at UC Davis has taken on the task of working with growers and the USDA Interregional Research Project #4 (IR-4) to develop data needed for registration of crop protection materials that are of interest to growers of specialty crops in the Western United States.

IR-4 is the only publicly funded program in the U.S. that conducts research and submits petitions to the Environmental Protection Agency (EPA) for registration of pest control agents on specialty crops. Specialty crops include nursery and landscape plants as well as cut flowers and potted plants (in addition to most vegetable, fruit, nut, herb, and spice crops).

The crop protection industry lacks incentive to pursue registrations on specialty crops for many materials because the low acreage involved means low return on investment. Recognizing this, the state land grant universities and the U.S. Department of Agriculture (USDA) organized the Interregional Research Project #4 in 1963 to address the shortage of pest control options for minor crops. A separate Ornamentals Program was created in 1977 and, since then, over 9000 registrations have been processed for ornamentals. The Biopesticide Program to support research and registration activities on biological pest control agents began in 1982, and 1998 saw the establishment of a Methyl Bromide Alternatives Program.

The IR-4 Program has evolved as a bridge to registration by generating and supplying independent, high-quality research data needed by EPA in order to register compounds for use on specialty crops. Collaborations are the strength of the IR-4 program. Input is sought continuously from the commodity production side of agriculture as well as from the crop protection industry, USDA and federal and state regulators.

The Environmental Horticulture Department at UC Davis has made a commitment to develop an IR-4 Center at the Department and we have begun to set up researchable projects. We have established a website at http://envhort.ucdavis.edu/ir4. In order to make the program most effective, we need industry input to identify labeling issues that will provide the greatest benefit to growers. Some examples of projects that would be considered for funding include:

- Registering a material for a particular application where there is currently no effective, registered product.
- Registering a material to provide a different class of chemical to use in a spray rotation.
- Registering a material that provides a shorter reentry interval.
- Registering a material that is currently registered, but does not contain provisions for commonly used application equipment such as ultra-low volume or electrostatic sprayers.

(Note that “material” refers to insecticides, miticides, fungicides, plant growth regulators, insect growth regulators, as well as various biological pest control agents.)

In addition to industry input, we also seek assistance to help us obtain plants and related resources for the experiments. The expectation of the IR-4 program is that the manufacturers supply the materials and that growers supply plants. The funding provided to us by the IR-4 program is fairly minimal and earmarked entirely for salaries. It is also of obvious interest to the industry to have us work with new plants and fresh materials for each experiment. Both growers and manufacturers benefit from this process in having their products included in the trials.

Our highest priority is to respond to the needs of the California ornamentals industry. We have identified a set of experiments that we will work on for the next few months. In addition, we are seeking industry input to identify experiments that we could begin this summer and fall, or at some time in the future.