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## **METHYL BROMIDE ALTERNATIVES PROGRAM**

### **IR-4's Methyl Bromide Alternatives (MBA) Program Incorporates the Use of Several Biopesticides**

First year research results from IR-4's MBA program for strawberries show that a biopesticide, DiTera® ES (Valent Biosciences), in combination with the synthetic pesticides chloropicrin and metam sodium has been a consistently excellent treatment. DiTera is a natural product derived from a fungus. It significantly reduces the soil population of parasitic nematodes. Other biopesticides are included in the current IR-4 strawberry research trials. Messenger® (Eden Biosciences) is a protein-based substance that enhances a plant's ability to suppress insects, mites, nematodes, plant diseases and boosts plant growth. Rootshield® (BioWorks, Inc.) is a biological fungicide made from live spores of a beneficial fungus. Help® (Stoller Enterprises, Inc.), a combi-

nation of Stabilizer® and Resist®, contains chelated micronutrients. It reduces nematode populations and enhances plant resistance to some fungal and bacterial diseases. Each biopesticide is paired with a synthetic weed control material in the research trials. Results will be available in early 2002.

Stabilizer and Resist are registered in most states as fertilizers. DiTera, Messenger and Rootshield are newly registered biopesticides and may not yet be registered for use in all states. If you have interest in using these products, check first with your state for registration status or call the manufacturer or contact Jack Norton, IR-4 Headquarters for assistance..

Article by Sandy Perry

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#### **California Department of Pesticide Regulation (CDPR) Includes IR-4's Methyl Bromide Alternatives (MBA) Program In It's Monthly Status Report**

Visit CDPR's web site on Status Reports For Fumigant Pesticides, <http://www.cdpr.ca.gov/docs/dprdocs/methbrom/srfpindx.htm> to follow the progress of the IR-4 California MBA trials. Click on the month you are interested in and scroll down to the "Methyl Bromide Alternatives" heading. The Status Reports are of particular interest to California Ag Commissioners and Farm Advisors.

Prepared by Sandy Perry

### **Methyl Bromide Alternatives (MBA) Research Extended to Cut Flower and Bulb Crops**

Recent promising MBA research projects, organized by IR-4 and involving strawberries and tomatoes in Florida and California have sparked interest from the cut flower and bulb industries. A proposal by Dr. James Gilreath, University of Florida and Dr. Clyde Elmore, University of California-Davis, to work on MBAs for cut flower and ornamental bulb growers in both Florida and California has been funded by USDA-CSREES. The 24-month grant of \$335,000 was awarded under USDA's competitive methyl bromide transition program to support this critically impor-

tant research. IR-4's Dr. Jack Norton participated in preparation and submission of the proposal. It included commitments from the IR-4 cut flower MBA alliance that formed last year. Dr. Norton also prepared and submitted another MBA proposal on behalf of the California Cut Flower Commission. This proposal, funded by US EPA for \$20,000, is designated for methyl bromide alternative cut flower research and demonstration programs. Dr. James D. MacDonald and Dr. Clyde Elmore, UC-Davis will do the work. For more information contact Dr. Jack Norton, [norton@aesop.rutgers.edu](mailto:norton@aesop.rutgers.edu).

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