METHYL BROMIDE ALTERNATIVES (MBA) PROGRAM

IR-4 Methyl Bromide Alternatives (MBA) Program Expanded in Floral Crops

Dr. James C. Locke, Research Plant Pathologist, USDA ARS, Floral Nursery Plants Research Unit, Beltsville, MD has initiated a methyl bromide alternatives (MBA) field research program in floral crops in collaboration with IR-4 Headquarters, Rutgers University, New Jersey. Results from this test will help further define the optimal use rates and use patterns of a number of experimental products under evaluation in IR-4’s MBA programs in strawberries, fresh market tomatoes, green peppers, summer squash, and cut flowers. Results from this trial will also be available for use by the cut flower/ornamental bulb industries to help satisfy the criteria needed for a critical use exemption (CUE) to permit the possible continued use of methyl bromide in cut flowers and ornamental bulbs beyond the 2005 phase out period.

All treatments were applied in water mimicking drip irrigation and included the experimental products SEP-100 applied at 100 and 200 lbs ai per acre, AJ 1629 2.4 EC applied at 27.5 and 55 lbs ai per acre, MULTIGUARD™FFA at 400 and 600 lbs ai per acre, MULTIGUARD™PROTECT at 400 and 600 lbs at per acre, and a combination of MULTIGUARD™PROTECT plus metam sodium (VAPAM HL) at a total ai rate of 400 and 600 lbs per acre. These treatments were applied in 3 gallon pots in soil enriched with sclerotia of Sclerotinia sclerotiorum and Sclerotinia rolfsii. The soil was also heavily infested with seeds of several weed species yet to be named. All treatments were replicated 10 times, blocked according to treatment and mulched with polyethylene plastic film. At 14 days post application, the mulch was removed, evaluations were made on the survival of sclerotia, and the pots were planted to transplants of several flower crops, including Celosia, Gypsophila, Zinnia, and Gomphrena. Weed control ratings were made periodically as were additional ratings on sclerotia survival at approximately one month post treatment. This test is still underway.

New Product Entries in IR-4 MBA Programs in Fresh Market Tomatoes and Strawberries

IR-4 is pleased to announce the continuation of the large-scale company-sponsored methyl bromide alternatives program for fresh market tomatoes and production strawberries for the 2002/2003 growing seasons in California and Florida. In addition to several products previously evaluated in the IR-4 MBA tomato and strawberry programs, products coming into the programs for the first time include a natural product from Uniroyal Chemical, UC-A1641, in both tomatoes and strawberries. Also, new entries for the tomato program include two weed control products from Syngenta, Dual applied preemergence and trifloxysulfuron sodium post-emergence, in sequential applications with Telone C35 shank injected treatments in Florida and INLINE drip-applied in California.

Products not to be included in the 2002/2003 IR-4 MBA programs include iodomethane, iodomethane/chloropicrin combinations, and metam sodium as a stand alone treatment or in several combinations where it was included solely for weed control.

Propozone Shows Promise as a Methyl Bromide Alternative in IR-4/Driscolls Field Program, Watsonville, California

Encouraging results are being obtained from Propozone (propylene oxide) drip-applied at 30 gallons per acre in a large plot field trial established last fall at the Driscolls research facility near Watsonville, California. Yield data show results from this treatment to be equal to the methyl bromide/chloropicrin (67:33) and the INLINE standard treatments.

Propozone plus other experimental methyl bromide alternative candidates, MULTIGUARD™FFA and MULTIGUARD™PROTECT have been placed in the fall 2002 IR-4/Driscolls strawberry methyl bromide alternatives program. Contact Dr. Jack Norton, Manager, IR-4 MBA Programs for additional information (norton.jack@worldnet.att.net) or (405) 340-1800.