"WHAT'S HAPPENING?"

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NEW SOIL FUMIGANT IODOMETHANE

by Darrell Hensley

The Environmental Protection Agency (EPA) has approved a one-year registration of iodomethane (methyl iodide) under highly restrictive provisions governing its use. Iodomethane can serve as an alternative to ozone-depleting pesticide methyl bromide. The risk assessment process for iodomethane has been one of the most thorough analyses ever conducted on a new pesticide. It has incorporated state-of-the-art methods and extensive chemical-specific toxicology and exposure data. The agency's assessment carefully evaluated the potential for cancer and special sensitivities to the most vulnerable populations. The agency also paid particular attention to potential exposures of those who live, work, or spend time in areas near fields where iodomethane might be used.

The risk-assessment techniques, protocols governing generation of toxicology studies, and exposure evaluation methods used to support the evaluation of iodomethane have been peer-reviewed by agency scientists, the independent Scientific Advisory Panel or both. By using a thorough evaluation process the agency concluded that there are adequate safety margins and the registration of iodomethane does not pose significant risks.

On September 25, EPA received a letter signed by 54 scientists who oppose the registration of iodomethane as a soil fumigant, citing potential human health and environmental concerns, and requested additional peer review. EPA has discussed our assessment with some of the signatories and sent a letter to inform the scientists of the rigorous science used to support EPA's decision.

Iodomethane can be used as a pre-plant soil fumigant to control plant pathogens, nematodes, insects, and weeds on strawberries, tomatoes, peppers, ornamentals, turf, trees, and vines. More information on iodomethane is available on EPA's web site at
http://www.epa.gov/pesticides/factsheets/iodomethane_fs.htm.

See the article below concerning MIDAS soil fumigant for more information.

MIDAS Soil Fumigant

by Darrell Hensley

Arysta LifeScience indicated that the Environmental Protection Agency (EPA) granted commercial registration for one year to MIDAS®, a broad-spectrum soil fumigant that effectively controls a broad range of soil-borne diseases, nematodes, weed seeds and insects that threaten high-value crops such as ornamentals, strawberries, tomatoes, peppers, stone fruit, nuts and vines, as well as turf. MIDAS should be widely available through select fumigant distributors by October 2007.

MIDAS was developed to help growers with the phase out of methyl bromide under the Montreal Protocol. Worldwide, about 72,000 tons of methyl bromide are used each year according to U.S. EPA data. North America uses about 27,000 tons annually, 85 percent of which is used for soil fumigation. Growers around the world have long relied on methyl bromide as their choice fumigant and the phase out has left growers with few effective broad-spectrum choices.

MIDAS is considered a foundation crop protection product because it is applied pre-plant to bare soil. MIDAS provides broad-spectrum crop protection which can reduce the overall chemical need and helps establish a strong healthy crop that delivers high yields. In trials in the southeast U.S., half of the growers who participated saw an increase in yield over their methyl bromide-treated acreage. The remaining growers saw results similar to those achieved with methyl bromide.

MIDAS has been in use under an Experimental Use Permit in Florida, Georgia, Michigan, North Carolina, South Carolina, Tennessee and Virginia since 2006. The EPA added test acreage in California in 2007. The company used these trials to evaluate efficacy, market yields and economic comparisons across several crops. Half of the growers who participated saw, on average, a 19 percent yield increase compared to methyl bromide on side-by-side trials on commercial acreage. The remaining growers saw results similar to those achieved with methyl bromide. Crops raised under the EUP are approved for sale to the market.

MIDAS is the first new soil fumigant to be registered by the EPA in 20 years. A comprehensive data package supports the product label. Arysta is committed to ensuring proper handling and application of MIDAS through the Arysta Certified Applicator Training Program.

The EPA has implemented buffer zones that are scalable based upon fumigant rate and number of acres applied. This will allow growers more control over their fumigant use. MIDAS is approved for use on strawberries, tomatoes, peppers, ornamentals, stone fruits, nut crops, vine crops (including table and wine grapes), turf and nursery crops.

FIELD CROP UPDATE

by Russ Patrick

Wheat: It is been proven that the use of seed treatments can reduce the risk of aphid damage and Barley Yellows. There are several listed in the manual for use on wheat. Choose the one that suits you best. The materials that we recommend are: Gaucho 600 or Cruiser 5. Both products will provide safety from aphids and the transmission of viruses.

Armyworms: I checked the traps today and found only a very few fall armyworms. Nothing to be excited about as of this writing.

Stored Grain: Aerate those bins day and night because we are having some cool temperatures. Don't just turn them on in the afternoon and turn them off the next day. It takes more than a day to push the air through the bin. The time depends upon the size of your fan and bin. Look inside the bin and check for any moldy grain or insects. Insects are active at this temperature until they drop below 60 F. They will

slow down feeding and reproducing at low temperatures. Don't just Fill and Forget. Check often at least once every couple weeks.

DOW AGROSCIENCES RECEIVES REGISTRATION FOR TWO NEW INSECTICIDES

by Darrell Hensley

Dow AgroSciences announced today it has received registration from the Environmental Protection Agency (EPA) of DELEGATE™ WG and RADIANT™ SC insecticides, two new insect control products containing an innovative, new active ingredient - spinetoram. DELEGATE WG has been labeled for use in tree fruit, grapes and tree nuts, while RADIANT SC is available for use in vegetables.

Spinetoram has shown excellent broad-spectrum insect control in fruit and vegetable crops. One example of the impact spinetoram brings to crop producers is that it provides apple growers with a new mode of action for the control of codling moth, as well as numerous other internal feeding lepidoptera.

DELEGATE™ - A New Mode of Action for Controlling Codling Moth. DELEGATE™ WG insecticide (www.DelegateInsecticide.com) is an essential, effective solution for the control of codling moth and a broad spectrum of damaging insect pests in apples, pears, stone fruit, citrus, grapes and tree nuts. Other insects controlled by DELEGATE WG include Oriental fruit moth, leafrollers, leafminers, thrips, tufted apple bud moth, pear psylla, cherry fruit fly, green fruitworm, peach twig borer and more, with suppression of apple maggot, plum curculio and citrus psylla.

DELEGATE™ WG insecticide provides a short re-entry interval, which allows growers to make early season insect sprays without delaying other important tasks. It also has short preharvest intervals of just one day for citrus; seven days for pome fruits, cherries, plums and prunes; and 14 days for peaches and apricots, which makes DELEGATE WG an effective late-season spray for broad-spectrum insect control prior to harvest.

RADIANT™ SC insecticide (www.RadiantInsecticide.com) is a powerful new product for the control of worms, thrips, leafminers and more in vegetable crops. It is labeled for use in fruiting and leafy vegetables, cole crops, cucurbits and other vegetable crops, RADIANT SC provides fast knockdown and control of a wide variety of vegetable pests, including loopers, armyworms, thrips, leafminers and diamondback moth. This formulation also offers a short re-entry interval, as well as short preharvest intervals and minimal personal protective equipment requirements.

Both RADIANT SC and DELEGATE WG may be used for broad-spectrum insect control in their respective labeled crops, with rotation with other insecticides such as INTREPID® 2F insecticide, when targeting worm pests. Rotation of insecticides is strongly encouraged to maintain the long-term effectiveness of these valuable tools and manage against resistance.

PLANT & PEST DIAGNOSTIC HIGHLIGHTS

by Bruce Kauffman

We received 43 samples from September 22 through October 8, 2007 including 14 samples via the UT Diagnostic Web Site.

FRUIT and VEGETABLES :

Tomato decline due to shade and plant competition; bacterial wilt of cucumber vectored by cucumber beetles; nutrient deficiency of hydroponic tomatoes; April freeze damage and twig dieback and early leaf drop due to drought stress of blueberries; leaf spot and early leaf drop due to drought stress on blackberry; cercospora leaf spot of turnip greens; glyphosate damage to strawberries.

TOBACCO AND FIELD CROPS :

Sclerotinia lower stem blight and late leaf spot (Cercospora) of peanuts; black shank of dark tobacco; red flour beetle infestation of corn bin; common smut disease of corn ears.

INSECTS , CRUSTACEANS, and MITES :

Two spotted mite damage and drought stress of burning bush; hemlock woolly adelgid and sooty mold of hemlock; striped mealybug on rose; flatid planthoppers on shrubs.

Insects in and around the house :

Whitefringed beetles; arrrowhead spider; marbled spider; Argentine ants; brown-lined cockroach; hairy fungus beetles in quail-rearing house.

ORNAMENTAL :

High phosphorus and ammonium levels and undesirable pH for growing pansies; branch dieback due to root death of fir; root death due to under watering of juniper; stem canker of hemlock; branch cankers, drought stress, root dieback due to over watering and excessive mulch on eastern white pine; root dieback due to under watering and phomopsis canker of Hinoki cypress; actinopelte, phyllosticta and anthracnose leaf spots of northern red oak; anthracnose or cercospora leaf spot of azalea; root decline of yew, spruce, eastern white pine and skip laurel due to over or under watering ; possible bacterial leaf scorch and/or root decline of elm due to under or over watering; snail feeding on leaves, mechanical stem injury and undesirable pH for growing chrysanthemums; over watering, phytophthora root rot and phomopsis canker of Cleveland pear; boxwood leaf miner, volutella and phoma twig canker dieback and root decline due to under watering of boxwood; basal canker disease (fungus in Xylariaceae) of holly; twig dieback caused by April freeze and drought stress on holly; stem buds formed following shade removal and/or mechanical damage to willow.

TURF :

Bentgrass decline due to over watering, curvularia leaf disease and pythium root rot; environmental and/or cultural stresses with gaeumannomyces fungal stolon infection of Champion bermudagrass; bipolaris leaf disease causing fading out of bermudagrass.

ANIMAL DAMAGE :

Squirrels cutting twigs of eastern redcedar and Shumard oak for food.

OTHER UT NEWSLETTERS WITH PEST MANAGEMENT INFORMATION

Fruit Pest News
http://web.utk.edu/~extepp/fpn/fpn.htm

Tennessee Crop and Pest Management Newsletter
http://www.utextension.utk.edu/fieldCrops/cotton/cotton_insects/ipmnewsletters.htm

Ornamental Pest and Disease Update
http://soilplantandpest.utk.edu/publications/ornamentalnwsltr.html

Tennessee Soybean Rust Hotline - 877-875-2326
USDA Soybean Rust Web Site http://www.sbrusa.net

This and other "What's Happening" issues can be found at
http://eppserver.ag.utk.edu/Whats/whatshap.htm

Precautionary Statement
To protect people and the environment, pesticides should be used safely. This is everyone's responsibility, especially the user. Read and follow label directions carefully before you buy, mix, apply, store or dispose of a pesticide. According to laws regulating pesticides, they must be used only as directed by the label.

Disclaimer:
This publication contains pesticide recommendations that are subject to change at any time. The recommendations in this publication are provided only as a guide. It is always the pesticide applicator's responsibility, by law, to read and follow all current label directions for the specific pesticide being used. The label always takes precedence over the recommendations found in this publication.

Use of trade or brand names in this publication is for clarity and information; it does not imply approval of the product to the exclusion of others that may be of similar, suitable composition, nor does it guarantee or warrant the standard of the product. The author(s), the University of Tennessee Institute of Agriculture and University of Tennessee Extension assume no liability resulting from the use of these recommendations.

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