RUMBA

Regular Update on Methyl Bromide Alternatives

December 2007

In this issue:

Special Announcement

U.S. EPA Climate and Stratospheric Ozone Award 2008 Nominations

To submit a nomination use the attached application.

Due No Later than 31 December 2007

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Learn more >

GLOBAL

1- Proceedings of the 2007 Annual International Research Conference on MBr Alternatives and Emissions Reductions

The conference took place in San Diego, California, October 29 - November 1, 2007. The objectives of this international research conference were to provide a forum to:

1. Support the gathering of data on potential alternatives to methyl bromide for future evaluation and prioritization.
2. Enhance technology transfer processes needed to economically and commercially implement methyl bromide alternatives.
3. Enhance scientific information and data exchange regarding current research on methyl bromide alternatives and emissions reduction.
4. Have interdisciplinary scientific exchange on Methyl Bromide alternatives and related issues.
5. Develop and distribute conference proceedings as an information source on state-of-the-art methyl bromide alternatives for use by Researchers, Users of Methyl Bromide, Legislators, Government Policy Officials, and all other interested parties.
6. To present and discuss research results of new pest and crop management practices, used to help formulate an integrated on-farm plan and timetable to seamlessly transition agriculture to a methyl bromide alternative pest management system which minimizes pest, crop, and other potential economic impacts.

Proceedings are now available at http://www.mbao.org/2007/Proceedings/MBAO%20Proceedings.ZIP

NORTH AMERICA

2- Arysta LifeScience Receives U.S. Registration for MIDAS®; Paves Way to Address Global Phase out of Methyl Bromide

CARY, N.C. -- Arysta LifeScience today announced that the U.S. Environmental Protection Agency (EPA) has granted commercial registration for one year to MIDAS([R]), 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([R]) will be widely available through select fumigant distributors by October 2007.

MIDAS([R]) 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([R]) is the fumigant answer for which many growers have been looking," said Mike Allan, Global Product Manager for MIDAS([R]). "MIDAS([R]) is the right foundation for success for growers because it provides broad-spectrum control of target pests and diseases and uses conventional application techniques and equipment. MIDAS([R])has been proven to be as effective as methyl bromide at lower application rates."

MIDAS([R]) is considered a foundation crop protection product because it is applied pre-plant to bare soil. MIDAS([R]) 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.

"This registration, after many years of hard work on the part of the Arysta team, is further evidence of our company's dedication to our grower partners," said Bill Lewis, CEO of Arysta LifeScience North America Corporation. "Throughout the regulatory process, we have remained committed to our principles of partnership with the agriculture community."

MIDAS([R]) has been in use under an Experimental Use Permit (EUP) 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([R])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([R]) through the Arysta Certified Applicator Training Program. In an effort to further ensure protection of workers and bystanders, 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([R]) is approved for use on strawberries, tomatoes, peppers, ornamentals, stone fruits, nut crops, vine crops (including table and wine grapes), turf and nursery crops.

Arysta continues to build international support for MIDAS([R]) with trials in many countries including Japan, Australia, New Zealand, Turkey, Morocco, South Africa, Israel, Costa Rica, Guatemala, Brazil, Mexico and Chile. The registration is further evidence of Arysta LifeScience's presence in the high-value fruit and vegetable crop market, which represents approximately US$8 billion in sales in 2006. MIDAS([R]) is a complement to the company's existing crop protection products that are used on crops ranging from corn and soybeans to fruits, nut trees and nursery crops. Arysta LifeScience www.arystalifescience.com

Source: CNET Networks, 8 October 2007, http://findarticles.com/p/articles/mi_m0EIN/is_2007_Oct_8/ai_n21028248/pg_1

3- Pesticide Use Down on California Farms in 2006

State regulators say education efforts are paying off but note that strawberry growers increased application of dangerous fumigants.

California farmers used 10 million fewer pounds of pesticides on crops last year, but strawberry growers increased their reliance on fumigants, which are considered among the most dangerous pest-killing chemicals, according to a state report released Thursday.

Mirroring a three-year trend, the state's farmers used smaller volumes of some of the most hazardous pesticides. Compounds linked to cancer or affecting reproductive and neurological functions declined by 2.5% to 9.3% in 2006, according to the California Department of Pesticide Regulation report.

But the state's strawberry growers, primarily around Oxnard and in the Salinas and Watsonville areas, applied fumigants to 5,000 more acres, using 132 more tons of the chemicals than in the previous year, according to the state's data. That is a 9% increase in acreage treated and a 3% increase in tonnage.

Fumigants are toxic gases that are injected into soil to kill a broad spectrum of weeds, insects and other pests.

Traces evaporate from the soil, raising the risk that farm workers and nearby residents will inhale them.
Statewide, 190 million pounds of commercial pesticides were used in 2006, a 3% decline from 2005, the state report says. The tonnage used on farms dropped nearly 6%, while the amount used for other purposes, such as landscaping and mosquito control, increased.
Most agricultural pesticides are applied in the San Joaquin Valley, led by Fresno and Kern counties.
Ventura County, which grows much of the nation's strawberry crop, ranks eighth.
Mary-Ann Warmerdam, director of the pesticide agency, said that the state "works hard to promote least-toxic pest management" and that the new data show "our efforts are paying off." But she acknowledged that "we have more work to do."
A major fumigant, methyl bromide, has been banned under a United Nations treaty that protects the ozone layer, although special exemptions allow it to be applied in some places, particularly in California and Florida.
California's strawberry growers used more methyl bromide last year than the previous year: The tonnage increased by 5% and it was applied to an additional 2,200 acres of strawberries, or 13% more, according to the state data. The volumes were slightly less than 2004's 3.2 million pounds.
Carolyn O'Donnell, a manager of the California Strawberry Commission, said Thursday that she suspects that the industry's fumigant use increased because more acres were planted.
"I think over the long haul, you will see a decrease in use," she said. "We're looking at all the ways we can phase out methyl bromide as fast as we can."
Source: Los Angeles Times, 30 November 2007, By Marla Cone, Staff Writer, marla.cone@latimes.com
http://www.latimes.com/news/local/la-me-pesticides30nov30,1,6145615.story?coll=la-headlines-california&ctrack=1&cset=true

SOUTH ASIA

4- Control of Cigarette Beetle in Stored Grains

The cigarette beetle is the most destructive insect pest of stored products such as ginger, herbal tea products, tobacco, turmeric and chllies.
Affects export : The damage by the beetle results in the quantitative and qualitative losses of the product and adulteration by excreta, dead beetles and other waste products which significantly affect the export chances of the commodity.
The eggs are oval shaped and creamy white in colour and are laid on the surface of stored material. They hatch in 9 to 14 days.
Four larval stages: The insect generally completes four larval instars before pupation.
Larval period ranges from 17 to 29 days and the pupal period varies from 2 to 8 days.
The adult beetle is light brown in colour. The insect attacks a wide variety of stored food products.
The attack of this beetle deteriorates the quality and reduces the nutritional and medicinal values of the products.
Probe traps: Monitoring of the insect presence is the basic and preliminary step in the successful management of the beetle. Installation of probe traps will help in this regard.
Periodical microscopic observation of the stored product samples for the presence of beetle’s eggs and the observation of randomly collected samples of 100 gm through the hand lens for the presence of larvae and adult beetles will be very much helpful.
Fumigation: Fumigation with aluminium phosphide tablets is effective in controlling the beetle.
Methyl bromide fumigation can be done only when the stored products are to be exported.
ZADDA KAVITHARAGHAVAN & S. MOHAN
Department of Agricultural Entomology Tamil Nadu Agricultural University, Coimbatore Tamil Nadu
Source: The Hindu, 29 November 2007, http://www.hindu.com/seta/2007/11/29/stories/2007112950141600.htm

SOUTH EAST ASIA AND PACIFIC

5- UNEP Organizes Meeting of ODS Officers in Bali

Denpasar, Bali Island (ANTARA News) - Ozone Depleting Substance (ODS) officers from 25 countries are attending a Joint Meeting of the South Asia, Southeast Asia, and the Pacific Network of ODS officers in Sanur, Bali Island, from November 12 to 14, 2007.

The regional meeting was organized by the United Nations Environment Program (UNEP) in cooperation with Indonesia`s Environmental Affair Ministry and with the financial assistance of the Swedish Government.

The theme of the network meeting is "Sustainable Compliance - Are We `really` there yet?", according Atul Bagai, Regional Coordinator of the UNEP Regional office for Asia and the Pacific.

The meeting`s participants will discuss compliance issues relating HCFCs, Methyl Bromide and the implementation of the Montreal Protocol which has set schedules for the phase-out of ODS.

The network meeting is held back to back with the First joint South Asia, Southeast Asia and the Pacific Multilateral Environmental Agreements (MEA) Regional Enforcement Network (REN) Workshop, which took place in Sanur, from November 8 to 10, 2007.

The MEAs discussed in the workshop are the Montreal Protocol, Basel, Rotterdam and Stockholm Conventions, which respectively deal with ODS, hazardous wastes, hazardous chemicals and pesticides, and POP (persistent organic pollutants).

Participants of the network meeting and workshop are ODS officers and customs officers from, among other things, Afghanistan, China, Fiji, India, Indonesia, Iran, Malaysia, Singapore, Maldives, the Philippines, Sri Lanka, Pakistan, Sweden, Thailand, Japan and Korea.

The MEA REN workshop which concluded on Saturday (Nov. 10) issued several recommendations which included a need on capacity building for custom officers on MEAs, and exchanges of intelligence and information about environmental criminal activities especially between the Police and Customs.

ODS such as CFC (chlorofluorocarbon) could deplete the Ozone in the stratosphere which later could cause diseases such skin cancer, eye cataract and kill planktons and other marine organisms.

Indonesia has planned to ban the importation of CFC and Methyl Bromide as of January 2008, respectively two years and seven years ahead of the Montreal Protocol`s schedules of CFC and Methyl Bromide phase-out.
Source: Antara News, 12 November 2007, http://www.antara.co.id/en/arc/2007/11/12/unep-organizes-meeting-of-ods-officers-in-bali/

PACIFIC ISLANDS COUNTRIES

6- Fruit Fly Research Aids Citrus Access to Japan

Citrus growers in eastern Australia now have greater access to the Japanese market as a result of research by the NSW Department of Primary Industries (DPI).
Trials undertaken at NSW DPI's Gosford Horticultural Institute have proven that cold storage at temperatures of 2-3 degrees C effectively kill Queensland fruit fly in citrus stored for 14 to 16 days.
Cold treatment at these temperatures provides greater market flexibility and reduces problems associated with cold chilling such as internal fruit and skin damage.
This new cold treatment is the Australian citrus industry's preferred method and Japan formally accepted it after the Federal Government advised them of the results of extensive replicated trials conducted at Gosford, NSW, and in Western Australia.
At Gosford, post-harvest researchers lead by NSW DPI's Andrew Jessup examined the effect cold treatment had on fruit fly experiment carried out on citrus sourced from the Murrumbidgee Irrigation Area (MIA), Victoria's Sunraysia and South Australia's Riverland regions.
In WA, researchers from the WA Department of Agriculture examined the impact of the same treatment on the Mediterranean fruit fly in local citrus.
The Qld fly is endemic to the east coast of Australia, extending inland for 600 kilometres or more, while Mediterranean fly is found in pockets around major townships in WA.
Mr Jessup says the Qld fruit fly, Bactrocera tryoni, is more suited to tropical and subtropical conditions and is more susceptible to cold treatment than is the Med fly.
The trials show that Qld flies were killed after 14-16 days storage, compared with 16 to 20 days for the Med fly.
The previous cold treatment at 1° C, if not managed correctly caused chilling injury to fruit.
Mr Jessup said that "the new, higher temperatures for disinfestation help to conserve fruit quality and are easier to maintain in-transit.
"They also provide an alternative to methyl bromide fumigation, which is toxic to citrus and shortens its shelf life," he said.
"Methyl bromide is also being phased out in Australia because it is ozone depleting."
The research is expected to assist in gaining market access for Australian citrus to other countries in the northern hemisphere.
Source: The Land, NSW, horticulture news service, 28 November 2007,
http://ngr.farmonline.com.au/news_daily.asp?ag_id=47179

7- Glitches Tipped with Fumigant

A system to recapture and neutralise the toxic gas methyl bromide at Port Nelson has never been tried on such a large scale and initial "glitches" should be expected, a court has heard.
Fumigation company Genera is proposing to use two recapture systems that are each three times bigger than any worldwide.
Air quality consultant Ron Pilgrim said upscaling the technology would be relatively straightforward, but it would require some fine-tuning to work successfully.
"I would be surprised if it was perfect first time."
Mr Pilgrim was giving evidence for Genera and made the statements under cross-examination during the second day of an Environment Court sitting in Nelson on Tuesday.
The court is hearing Genera's appeal against the Nelson City Council's air quality plan, which would require the company to apply for resource consent every time it carries out a large-scale fumigation at the port.
Genera, Public Health and the city council have agreed on a set of draft rules for fumigations at the port, which if accepted would mean the company would not have to go through the resource consent process.
Genera says the recapture system it is proposing would destroy 90 percent of the 2.3 tonnes of methyl bromide used at the port.
However, Campaigners Against Toxic Sprays, the other party in the appeal, has not agreed to the rules, saying it was concerned that evidence on the proposal had not been publicly discussed.
Methyl bromide is a toxic greenhouse gas and its use as a fumigant has stirred controversy after the widows of three port workers said they thought it was linked to their husbands' deaths from motor neuron disease.
Mr Pilgrim said the recapture system would be used on 12m containers and sawn logs fumigated in Shed 3 at the port.
Methyl bromide used on 6m containers would not be recaptured but would be vented to the air.
The port had provided a second area 200m from the port's southern boundary to fumigate some 6m containers, but as it was a small area some containers would still have to be fumigated 100m from the boundary, he said.
The larger containers accounted for just 7.5 percent of the methyl bromide used at the port, he said.
Mr Pilgrim was confident that under the strict conditions proposed, which included only venting containers during certain hours and weather conditions, health standards set for the use of methyl bromide would be met.
Under cross-examination by toxic sprays group lawyer Warwick Heal, he said cruise ships shouldn't dock near a site where 6m containers would be vented if fumigations were underway, but he thought recreational boat users in the port would be safe.
Nordiko Quarantine Systems Ltd technical director Ken Brash said the recapture system it had developed was in use worldwide. It was easy to operate and worked successfully.
Source: Stuff.co.nz, 07 November 2007
http://www.stuff.co.nz/stuff/nelsonmail/4265097a6510.html

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FEATURED READING >>> Methyl Bromide: Quarantine and Preshipment Uses
http://ozone.unep.org/Publications/UNEP-Ozone-Secretariat-MP-Brochure.pdf

FEATURED EVENT >>> 2nd Announcement for the European Turfgrass Society Conference to be held in Pisa (ITALY), 19-20 May 2008. www.agr.unipi.it/ETSC

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