Phosphine Changes Proposed

The EPA is proposing new controls on the use of phosphine (Phostoxin) gas as a fumigant. The new proposals are the result of serious health concerns for workers involved in the grain industry.

1. Reduce the exposure standard for phosphine gas to 0.03 ppm from 0.3 ppm.
2. Prohibit fumigation and aeration within 500 feet of residential areas.
3. Require those performing the fumigation to be certified applicators.
4. Require managers to notify local residents and adjoining commercial and industrial sites prior to fumigating.
5. Require stringent monitoring during unloading or otherwise moving commodities fumigated with phosphine gas.
6. Require that the storage structure be checked for leaks prior to fumigation.
7. Prohibit treatment of burrow for rodent control within 100 feet of any residence.

The National Grain and Feed Association (NFGA) and the Grain Elevators and Processing Society (GEAPS) have joined 24 other national and state agricultural organizations to urge Agriculture Secretary Dan Glickman to intervene with the federal Environmental Protection Agency (EPA) to preempt the issuance of a proposed restrictive rule on the use of phosphine fumigants.

A letter to Glickman stated that the EPA's proposal would:

—continued on page 2
**Phosphine Changes Proposed**

(continued from page 1)

- Reduce the exposure standards for phosphine gas to a tenth of the amount considered safe by the Occupational Safety and Health Administration (OSHA).
- Establish a radius in residential areas in which fumigation and aeration would be prohibited, severely impacting elevators located inside towns.
- Require unnecessary notification of local residents, authorities, and neighboring commercial and industrial sites.

"These misguided requirements would imperil the use of aluminum and magnesium phosphide as agricultural commodity protectants, to the detriment of America’s agricultural producers, commercial grain handlers, and ultimately, U.S. consumers," the letter said. We also are concerned that such requirements could undermine the ability of exporters to meet contractual requirements with other products loaded on oceangoing vessels."

**Methyl Bromide Ban Delayed**

Language inserted in omnibus budget bill passed the U.S. Senate and signed into law by President Clinton on October 20, 1998 postponed the upcoming ban on the use of the fumigant, methyl bromide, from 2001 until 2005.

The provision, originally inserted into an agriculture relief bill that was vetoed by Clinton earlier in October, was spearheaded by U.S. Representative Dan Miller, R-FL, and Representative Fazio R-CA. The North American Millers Association worked closely with congressional staffers both on the original provision and on getting it inserted into the $500 billion budget bill.

"We would have preferred to have had a public hearing and debate on the measure and passed a bill the old-fashioned way," committed NAMA Vice President Jim Bair. "But with a controversial measure like this so close to elections, this was the only practical way to get it passed." In short, the comprehensive Clean Air Act of 1990, which bans ozone depleting substances seven years after being listed, was changed without even a word of discussion or debate by Congress.

Under current U.S. law, all uses of methyl bromide would be banned in the United States on January 1, 2001. However, an international treaty to which the United States is a signatory, does not ban methyl bromide in developed nations until 2005. (Developing nations have a longer timetable, extending until 2015) The language in the budget bill harmonizes U.S. law with the international agreement.

Source: GRAINET

**Our Webpage:**

www/insectslimited.com

The webpage for Insects Limited, Inc. and Fumigation Service & Supply, Inc. continues to be upgraded its. The number of hits this summer reached a new high of over 200 per day in July and August. We are continuously adding research articles, helpful tips, new product information, and hot links to government and research organizations. The World Wide Web: "It you aren’t on it, you can bet your competitors are."
The Montreal Protocol is an international agreement signed by most of the countries in the world to help protect the planet against harmful UVB radiation in spite of the economic consequences of the individual country. The Montreal Protocol is and will be a “blueprint” for future international environmental protection (e.g. Kyoto, November 1997).

The United States has always been a leader in international environmental issues. Many countries like Canada and the 16 European nations have followed and supported the example of the United State’s policy of aggressively phasing out Ozone Depleting Products (ODP’s) like freon (CFC’s), Halon (fire extinguishers), and methyl bromide (fumigant). The U.S.’s generous contribution to the $750 million dollar Multilateral Fund of the Montreal Protocol was established to help eliminate all ozone depleting substances. Its 25% or $125 million has lead financially to help developing countries work for a timely phaseout of methyl bromide.

Now on October 20, 1998, a change of U.S. policy during a time of complex compromising has shaken the confidence of the countries that look to the U.S. for leadership. Canada has been a champion for aggressive phaseout of ODP’s and a leader in the world on methyl bromide alternatives. Put yourself in the place of our northern neighbors: here is an enormous trading partner to the south that has changed its course on an environmental issue that will have a large influence. I expect that the same rhetoric that the U.S. had about Mexico taking jobs away from U.S. agriculture will now be spoken from Canada about the U.S.: “Unleveled field of play, aye.”

Finally, the Montreal Protocol is bigger than one country; it is bigger than the industries’ bottom lines in this country. It is 162 countries, for the first time in the history of mankind, sitting at the same table and talking and acting to make this planet a better place to live for us and for our children.
Food Protection '99
Fumigants & Pheromones Technical Conference
INDIANAPOLIS
April 18-20 & April 21-22

Sunday, April 18
Registration and Check-In
6-7:00 pm  University Place Convention & Hotel/ A Doubletree Hotel
Get Acquainted Reception

Monday, April 19
Registration 7:00 to 8:15 am
8:15  Welcome & Introductions
David K. Mueller, Program Chairman
8:30  Keynote Address: Life After Methyl Bromide (LAMB)
Ken Sheppard, The Quaker Oats Company, Chicago, IL
9:30  Bobby Corrigan, RC Consulting
Food Plant Inspections...What I Look For
10:30 Coffee Break
11:00  David K. Mueller, Fumigation Service & Supply, Inc.
Alternatives to Methyl Bromide...A period of transition
12:00 Lunch
1:15  Bobby Corrigan
Managing Birds and Rodents
2:30  John Mueller, Fumigation Service & Supply, Inc.
Proposed Phosphine Label Changes...and what this will mean to you
3:15 Coffee Break
4:15  Steven Pratt, CSIRO- Australia
Advanced Phosphine Monitoring Techniques
Host Reception: Buses leave for host reception @ 6:00 pm from lobby to visit the new Westfield training facilities; dinner and entertainment included.

Tuesday, April 20
8:30  Steven Pratt
Alternatives to Methyl Bromide from Australia
9:30  Alain Van Ryckeghem, Insects Limited, Inc.
New Developments in Monitoring Stored Product Insects
10:15 Coffee Break
10:45 Allan Dowdy, Ph.D., USDA, Manhattan, KS
Insect DNA Fingerprints / Spatial Mapping
11:45 Lunch
1:00  Curt Hale, General Mills, Inc., Cedar Rapids, IA
Food Borne Allergens; Peanuts, peanuts, and no peanuts
2:15 "Liv' Clarke, Peterborough, Canada
Heat Treatment in Food Plants...and other Canadian Success Stories
3:15 Break
3:45 Larry Pierce, Food Protection Services, Hawaii
How to Setup, Record, Interpret, & Maintain a Pheromone Trapping Program
5:00 Certificates and Certification Sign-out.
Optional: NBA's Indiana Pacers vs. Cleveland Cavaliers, 7:00 pm
Market Square Arena, Indianapolis (limited tickets available)

Cost for the Fumigants & Pheromones Technical Conference
The fees for this conference will cover tuition, materials, conference notebook, a copy of the book Stored Product Protection, two lunches, six coffee breaks, a host sponsored reception, transportation to Westfield for a host sponsored outdoor Pig Roast with live entertainment. The fees do not include lodging or the NBA game ticket. The total fee is $395 per person.

April 21-22, 1999
Fumigation Short Course
This hands-on training program is limited to 20 people. It will be held at the new Westfield training facility of Fumigation Service & Supply, Inc. and Insects Limited, Inc. Nowhere else can you receive such training. This course will let you experience various types of fumigations in a real setting. Sharing this experience from field-tested experts will help train you or your employees to perform pest management better and safer.

COST
The fees for the course will cover tuition, study materials, a copy of the books Stored Product Protection and Insects and Mite Pests in Food (2 vol.) lunch on class days, and a ticket to the NBA basketball game. (workshop) The total fee is $565 per person, not including the lodging, transportation, and other meals.

LIMITED
Because of the hands-on field oriented demonstrations involved with this Short Course, it is limited to twenty (20) persons.

 LODGING and MEALS
Participants will be responsible for their own rooms, transportation and meals that are not covered by the tuition. The course will be held at 16950 Westfield Park Rd., Westfield, IN. Special room rates for the Marriott Courtyard, 1-317-571-1110 (Carmel) or University Place Hotel, 1-317-269-9000 have been granted for this Short Course. Letters of confirmation with details about the Short Course will be sent out. Please bring your confirmation letter when registering.

Continuing Education Credits:
Continuing Education Credits toward your certification have been applied for in many of the same states where participants have attended in past conferences. For more information about continued education credits, contact Barb Basa, 1-317-896-9300.
**Wednesday, April 21**

5:00  Reception  
6:00  Leave for Downtown NBA game at Market Square?  
7:00  Indiana Pacers (Coach Larry Bird) vs. Cleveland Cav’s?

**PROGRAM**

**Wednesday, April 21**

8:30  Welcome: Introductions and Announcements  
Overview of Short Course  
9:00  Prevention, Monitoring, and Control  
David K. Mueller  
10:15  Stored Product Insect Identification, Alain Van Ryckeghem  
12:00  Lunch  
1:00  Fumigation Workshop, John Mueller and Steven Pratt  
Bin fumigation with J-System  
Confined space entry  
Pressure testing  
Perimeter monitoring  
Aluminum and magnesium phosphide fumigation  
Carbon dioxide fumigation  
Refrigerated truck trailer fumigation  
4:00  Safety Workshop, Pat Kelley  
Gas detection,  
Air samplings  
Respiratory equipment  
Corrosion management

**Thursday, April 22**

8:30  Pheromone Trapping Workshop  
Alain Van Ryckeghem  
10:30  Record keeping, data base entry, and spacial mapping results  
12:00  Lunch  
1:00  Fumigation Workshop II, John Mueller  
Visit bin fumigation and take gas readings  
ECO_FUME fumigation  
3:30  Short Course Review,  
David K. Mueller, John Mueller, Pat Kelley, Allan Van Ryckeghem  
4:00  Course Exam  
5:00  State certification sign-out and Course Certificates

Optional: Indiana State Certification Examination for categories 7d and 7e.

**Fumigation Short Course Faculty:**

**Alain Van Ryckeghem.** Insects Limited, Inc., Technical Director, former Professor at Sir Sanford Fleming College, Lindsay, Ontario, CANADA 1986-1998. Pest management specialist, BS Entomology, Purdue University.

**David K. Mueller.** Insects Limited, Inc., President, Board Certified Entomologist, 23 years experience in stored product protection, author of course book, specialist in methyl bromide alternatives, over 1000 fumigations of all types to his credit. BS Entomology, Purdue University.

**John Mueller.** Fumigation Service & Supply, Inc., Vice-President, specialist in fumigations, 12 years hands-on field experience over 1000 fumigations of all types to his credit.

**Patrick Kelley.** Fumigation Service & Supply, Inc., General Manager, specialist in fumigations with 15 years experience and over 1000 fumigations of all types to his credit, respiratory safety and gas monitoring, BS Science, Purdue University.

**Barb Bass.** Fumigation Service & Supply, Inc., Office Manager, registration and local arrangements. (1-317-896-9300, e-mail: insectsltd@aol.com).

**REGISTRATION**

Mail your reservation and payment to:  
Barb Bass  
Fax: (1) 317-867-5757  
16950 Westfield Park Rd.  
Westfield, IN 46074, USA

[ ] $395 Fumigants & Pheromones  
Technical Conference  
April 18-20, 1999

[ ] $565 Fumigation Short Course  
April 21-22, 1999

Total US$ ________________

(Please copy and fill out one for each registrant)

NAME TO APPEAR ON NAME BADGE/CERTIFICATE

COMPANY

ADDRESS

CITY

STATE/PROV.

ZIP CODE/PCS

COUNTRY

PHONE

FAX

E-MAIL ADDRESS

Credit card number to charge registration against:  
[ ] VISA  [ ] MasterCard  [ ] American Express

CREDIT CARD NUMBER

EXP. DATE

SIGNATURE

**Confirmation:** A letter will be sent to each person confirming his or her registration. A limited number of registrations will be available. In the past, some people were unfortunately turned away. No moneys will be collected if there are no reservations available. The organizers of this conference have the right to refuse admission to anyone to this conference and workshop. Your confirmation letter will outline the details for the conference and short course, and directions to the various venues. Bring your confirmation letter to the registration desk upon arrival. All registrations must be paid with registration form.
Registration of the cylinderized formulation of phosphine and carbon dioxide called ECO$_2$FUME in North America has not yet been approved. It is anticipated to occur for non-food applications in early 1999 and food applications in late 1999 or 2000.

In the meantime, Bob Ryan of BOC Gases Australia Ltd. has directed registration and installations of ECO$_2$FUME in Australia, Cyprus, China, and scheduled for installations in Thailand and Vietnam in 1999.

To support registration, the following study was generated out of Oklahoma State University:

**Effects of Exposure Time, Temperature and Life Stages on Mortality of Stored Grain Insects Treated with Cylinderized Phosphine.**


A cylinder-based formulation of phosphine dissolved in liquid CO$_2$ was evaluated as a toxicant against Plodia interpunctella, Rhyzopertha dominica, Sitophilus oryzae and Tribolium castaneum in controlled laboratory studies. A dose of approximately 200 ppm phosphine was used in all studies. Adults of the three beetle species were the most susceptible life stages and experienced 100% mortality within the first 8 hours of exposure at both 32C (90F) and 18C (65F) degrees. Exposure times up to 3 days were required for 100% mortality of beetle adults at the lower temperature of 0.5C and 5C degrees. Six days or longer were required to attain 100% mortality at the lower temperature of 0.5C and 5C degrees with eggs and pupae, the more tolerant life stages, of all species. However, 100% mortality of these same tolerant life stages was achieved in 1-2 days at 32C/90 F. Phosphine in cylinders can be applied to bulk grain at cold temperatures and can clearly control insects under such conditions provided the exposure time is adequate. For phosphine to be a substitute for methyl bromide in structural fumigations, applications should utilize a cylinderized formulation for rapid delivery, maintenance of the required dose, and application of heat to ensure that tolerant life stages will be killed in a timely manner. Avoidance or tolerance of corrosion risks should be considered by those using phosphine in structures.

### New Grain Protectant

The Bayer Regulatory and R & D Group mentioned at the NPCA meeting in Nashville (October 1998) that they are six months away from introducing a new grain protectant.

The alpha cyfluthrin compound will replace Actellic, malathion, and Reldan (all organophosphates not in favor with the EPA) at a rate of 2 ppm. Tempo is the brand name for cyfluthrin and is similar to this new compound. Alpha-cyfluthrin can be used at 1/2 the dose of Tempo.

If Bayer brings this new synthetic pyrethroid to the market, the grain, popcorn, and wild bird seed industries will have a low concentration residual compound that is effective as a preventative (not a fumigant). When applied early in the season or after harvest, it could help to prevent stored product insects from developing. Stay tuned.

### Test of Effectiveness of Encapsulated Cyfluthrin

A new encapsulated form of the pesticide, cyfluthrin, was applied to Hard Red Wheat at levels of 0.5, 1.0, 2.0 and 4.0 parts per million (ppm) and treated samples were stored for eight months at 20/67 F, 25/77 F, 30/87 F, and 35/93 F degrees C. Rice weevils were used to test the effectiveness. Storage temperatures had no effect on insecticide potency. Higher concentrations showed the expected increases in killing power which decreased with time. At 0.5 ppm, approximately 38% of the rice weevils survived exposure to grain which had been stored for eight months. At 4.0 ppm, survival values ranged from less than 1% after 2 months of storage to approximately 10% survival after 8 months of storage. This insecticide is not currently registered for use on stored wheat. (Frank Arthur, Ph.D., US Grain Marketing Research Laboratory, Manhattan, KS, arthur@usgmrl.ksu.edu)

### Effectiveness of Different Diatomaceous Earth Formulations as Insecticides

Four diatomaceous earth formulations and one calcium carbonate formulation were evaluated in combination with high temperature as a control method for red flour beetles. At 34 degrees (92 F), exposure to the dusts for 15 to 30 minutes did not increase mortality over untreated controls. At 50 degrees C (122 F), dust exposure increased mortality from 8 to 100% depending on the formulation. The calcium carbonate was not effective at either temperature. (Alan Dowdy, Ph.D., US Grain Marketing Research Laboratory, Manhattan, KS, dowdy@usgmrl.ksu.edu)
New Faces and Names

Alain Van Ryckeghem
Technical Director
Insects Limited, Inc.

Alain is from Peterborough, Ontario Canada. He is an entomologist with a BS degree from Trent University. Alain has been the coordinator for the Pest Management Program at Sir Sandford Fleming College in Lindsay, Ontario since 1986. Alain has prepared hundreds of students at Fleming College for jobs in the pest control industry and for students going on for advanced degrees. Alain is an excellent entomologist and pest management specialist.

We feel lucky to have Alain as part of our management staff at Insects Limited. Alain will work on developing new trapping systems and conducting training in the new facility in Westfield and answering your technical questions. Alain has worked with Insects Limited, Inc. during the summers for the past three years. After January 1, 1999, ask for Alain when you call for technical questions to help solve pest problems. (1) 317-896-9300.

Brian Simons
Fumigation technician

Brian started with Fumigation Service & Supply, Inc. in October, 1998. He is from LaFontaine, IN. He was recently married (Jennifer), and lives in Tipton. Brian received his experience in fumigating by heading up a fumigation crew at a large popcorn company where he developed special techniques in phosphine fumigations and pest monitoring. Brian’s farm background has taught him not to be afraid of hard work. He is an avid deer hunter. After an intense in-service training period, Brian will be fumigator-in-charge of his own fumigation crew.

Jeff Waggoner
Manager

Jeff is from Lewisville, IN and recently graduated from Purdue University. Jeff has worked during the summers with our fumigation crews since 1994.

He also comes from a farm background and has developed a strong work ethic and a quick wit. Jeff will take over some of the advertising and marketing projects for our companies. Jeff has excellent computer skills and has designed some of our programs in the past.

Merle Bennett
Shipping and Receiving

Merle is our new shipping and receiving manager. He is originally a ‘farm boy’ and was born and raised in Silver Lake, Kansas. Merle lives in Anderson and has five children, and six grandchildren. With a new 13,000 sq.ft. warehouse to organize and fill with over 500 products, Merle will be busy. Merle will be your contact for placing and tracking orders. Call 1-800-992-1991.

Phosphine Risk Mitigation

The EPA is planning to propose new controls on the use of phosphine gas as a fumigant. The new risk mitigation measures proposals are the result of serious health concerns for workers involved in the grain industry. There were 12 injuries cited over the past 20 years as a reason for this action.

Proposed Changes

1. Reduce the exposure standard for phosphine gas to 0.03 parts per million.
2. Prohibit fumigation and aeration within 500 feet of residential areas.
3. Require those performing the fumigation to be certified applicators.
4. Require managers to notify local residents and adjoining commercial and industrial sites prior to fumigating (within 750 feet).
5. Require that the storage structure be checked for leaks prior to fumigation.
6. Require stringent monitoring during unloading or otherwise moving commodities fumigated with phosphine.
7. Prohibit treatment of burrows for rodent control within 100 feet of any residence.

What can you do?

A simple letter written on your company’s stationery to your Congressman and Senators will have an impact on these proposals. A fumigator from Texas wrote such letters and the telephones began to ring at EPA with inquiries from Congress. Letters to Washington have to be answered with letters. Get a response from your legislators if you feel that these proposals are damaging to your job or your company’s future.
Mueller Works for UNIDO

David Mueller, President of Insects Limited, Inc. completed four United Nations missions to developing countries where he visited Cote d'Ivories, Thailand, Jamaica, and Vietnam twice in 1998.

Vietnam and Thailand have been awarded demonstration projects to help develop viable alternatives to methyl bromide on rice, corn, tapioca, and timber. Sixty percent of the exported rice in the world comes from these two Southeast Asian countries. They feed 140 million people in their own countries and supply 12 million metric tons of rice to countries in Africa and Asia.

Mr. Sergio Meranda da Cruz of UNIDO and Dave Mueller in York.

In Vietnam, the executive committee of the Montreal Protocol awarded over US$500,000 to build a super fumigation warehouse near the docks of Saigon (Ho Chi Minh City). Mueller has designed and will help implement this 24 month project that will utilize modern technology on automated cylinderized phosphine fumigations (ECO,FUME) in a 2,000 ton capacity warehouse built especially for bagged rice and timber. The results of this and the Thailand demonstrations will be shared directly with other developing countries in the region and countries throughout the world.

Mueller says: “This year provided a tremendous opportunity to exchange knowledge and friendships with people visited in Vietnam, Thailand, China, England, Germany, Austria, Scotland, Belgium, Canada, Jamaica, South Africa, Australia, and Cote d’Ivories. In most places, I believe I learned more than I offered.”

The Multilateral Fund of the Montreal Protocol has allocated $50 million dollars for these methyl bromide alternative demonstration and phaseout projects. The protection of the export commodities and balance of trade for these developing countries is vital. The phase out of methyl bromide would have had a tremendous negative impact if it wasn’t for the forethought of the Montreal Protocol and United Nations Industrial Development Organization (UNIDO).”

In the future, Mueller plans on continuing this work as an International Fumigation Expert for UNIDO and share his experiences and knowledge with other countries and companies interested in alternatives to methyl bromide.

United Nations Industrial Development Organization (UNIDO) headquarters in Vienna.

China: Over 3 billion bushels of grain is stored in China for future reserves. Much is still stored in “grass” huts like these in Beijing. New concrete storage is being expanded throughout China.
Rice is the stable food for the 80 million people who live in Vietnam. 80% of the population are farmers who work without mechanization six days a week. Vietnam exports 20% of the rice in the world. Most is fumigated with methyl bromide.

China: The Great Wall of China is 3000 miles long and took over 1000 years to complete with the labor of 300,000 people.

What I learned while on mission:

It is great to be an American, but we are not always right. The ways of the developing world may be different but that isn't wrong. The protection of rice that has been planted, transplanted, sprayed, harvested, and transported all by hand is important to protect from insects and other pests. The loss of methyl bromide to a country that depended dearly on those trade dollars to help become a first world country in one generation were more open to alternatives to methyl bromide than most people I work with in the United States. The United Nations and its people are helping developing countries become better. I found the experience to be fantastic.

40% of the exported rice in the world comes from Thailand. Over 90% of this rice is fumigated with methyl bromide prior to export.

A Buddhist monk makes an offering at the Temple of the Emerald Buddha in Bangkok, Thailand.
New Fumigation Chamber

Besides a new lab and a training facility, we now have a 20,000 cu. ft. fumigation chamber at the Westfield, IN facility. This will allow us to fumigate semi-trucks loaded with pallets, museum objects, quarantine products bound for California or overseas, or a 50 pound bag of parent seed. We have used this specially sealed, heated, and aerated chamber to fumigate some art objects with carbon dioxide for six days and many other commodities.

It is hard to find a place to fumigate large trailers of cold product in the winter months. This chamber will heat the load and fumigate it in a short time period. If you have products that need to be fumigated and can be sent to our new fumigation chamber, contact John Mueller at 1-800-992-1991.

Grain, Grain, Go Away

1998 was a year with full bins and low prices on grain. Not since the Reagan Administration (1980's) has North America seen such conditions that cause storage shortages that make it necessary to put grain in piles on the ground again.

These conditions are conducive to insect problems too. Fumigation Service & Supply, Inc. fumigated more grain in 1998 than any other time except the mid-1980's. John Mueller, Director of Service for FSS and his crews worked non-stop from July until November fumigating mostly wheat reserves from Tennessee to Michigan. John stated: “In a normal year we will fumigate about 100 structures and from 5-10 million bushels of grain. In 1998, we were very busy. I estimate we fumigated over 125 structures, and 50 million bushel of grain this year.”

With the mild winter in 1997-98, the grain temperatures never really got cold enough to provide a 'winter kill' on the pest insects. In the Spring, the grain was warm early and the pests got a big jump on their population. When grain prices became depressed, the storage time went through the Summer months and the insect populations were extremely large. Those same grain bins were empty the last 7-8 years during the summer months.

So blame it on El Nino and surplus crop throughout the world.

But we make exceptions at Insects Limited, Inc. with the most complete line of Pheromone traps for the Pest Control Industry and the knowledge to help you use them effectively!

Call for a FREE Catalog
1-800-992-1991
Explore our website at:
http://www.surf-ici.com/
insectslimited,inc/home.html

Order today!

1-800-992-1991
www.insectwslimited.com
A milestone has been reached with Fumigants & Pheromones Newsletter.

On October 1, 1981 this newsletter was first distributed to the insect control and pest management industry for the first time. This first issue was an announcement also that a new company had started in Indianapolis called Fumigation Service & Supply, Inc. Now after 50 issues, seventeen years, and over ½ million newsletters distributed to all 50 states in America and over 30 countries worldwide, the look is different but the purpose is the same: to distribute the latest information on stored product protection to our customers and other interested listeners.

The cost to produce this newsletter each year now runs about $60,000 and many untold hours of writing copy, sorting, international mail separation, postage, layout, pictures, graphics, proofreading, more proofreading, illustrating, checking sources, and massageing a mailing list that has now grown to over 10,000. Is it worth it? No doubt, Fumigants & Pheromones is our best salesman!

This newsletter has commercial rewards, even though we don’t accept advertising. Our rewards were explained simply by Mr. Orville Redenbacher when he visited Purdue University on the “back of the station wagon popcorn revival” in 1974: He said; “People who don’t know will buy from people who do know.”

Over the past 17 plus years, new customers have come to our companies with questions to problems only to purchase products and services as a result. We now have over 5000 customers to show for it.

“I’m always amazed when I meet someone for the first time and they recognize my face and talk about some article or Soapbox that appeared in the newsletter that they remembered,” said David Mueller, editor and publisher.

So let’s go for issue 100!

Thank you for listening.

We hope that the information that you receive from this newsletter will help you in your business, and you, in turn, will support our business efforts.
New Pheromone

A new pheromone is available from Insects Limited, Inc. for the Varied carpet beetle (Anthrenus verbasci). This sex-attractant attracts the male adult beetle.

After three years of field testing this pheromone, researchers at Insects Limited have discovered the following:

- The adult male Varied carpet beetle begins to emerge slowly in late February.
- The adults try to go outdoors in the spring and are attracted to windows.
- The male and female adults meet outdoors at flowering plants (e.g. spirea and other small white odorous flowers) to mate.
- The male adult beetle goes back indoors and is only active in the spring and early summer months.
- The pheromone Bullet Lures lasts for 6-8 weeks indoors and 4-6 weeks outdoors.
- The pheromone works well outdoors near flowering plants.
- The pheromone can help locate an infestation of Varied carpet beetles indoors (e.g. museum, textile factory, old homes).
- The larva is the damaging stage and can be found in dark and undisturbed locations.
- The Varied carpet beetle is more of a pest problem in the United States than the Webbing clothes moth.

New Centre

An International Centre for Safe Commodity Storage (ICSCS) has been created at the Central Science Laboratory's new purpose-built site near York, in the north of England.

The centre will stimulate and facilitate activities by International collaboration—currently on alternatives to methyl bromide, quality standards, mites and malting barley, pesticide resistance, pest biology, insect detection, and alternatives to organophosphates (OP's) for storage protection. Part of the centre will be a "virtual" facility with experts and organizations from around the world participating in funded projects on storage issues.

Editor's note: The CSL facility in York is the finest stored product research facility in the world with a staff of top notch scientists ready to work with the industry to develop better products and strategies for protecting grain and food.

For more information about CSL and their new Centre contact: Paul Cogan, Business Development Manager, tel: +44 1904 462688, fax: +44 1904 462252, e-mail: p.cogan@csl.gov.uk, website: www.csl.gov.uk