Governor Baldacci's Task Force to Promote Safer Chemicals in Consumer Products Final Report

December 2007

Executive Summary: Key Conclusions

There is inadequate federal regulation to assure that consumer products are safe.

The 1976 federal Toxic Substances and Control Act (ToSCA) was intended to provide a framework for federal regulation of chemicals found to present an unreasonable risk of injury to health or the environment. It was meant to encourage industry to develop adequate data with respect to the effect of chemical substances and mixtures on health and the environment.

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Report [PDF format, 1.2 MB]
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Appendices D-F [PDF format, 278 KB]
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Full Report [PDF format, 2.5 MB]

The Task Force to Promote Safer Chemicals in Consumer Products agrees with the U.S. Government Accountability Office (GAO) and others that ToSCA does not provide sufficient chemical safety data for public use by consumers, businesses and workers; is inadequate to ensure the safety of chemicals in commerce in the United States; and fails to create incentives to develop safer alternatives. Even considering ToSCA combined with the federal Occupational Safety and Health Act (OSHA), federal regulation fails to provide health and ecotoxicity information regarding the safety of chemicals that have the potential to harm workers and the public at large.

There are real concerns regarding pesticides found in consumer products.

Pesticide products are registered by the EPA for use in the U.S. under the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA) of 1972, and there are additional requirements for pesticide safety testing and risk assessment under the 1996 Food Quality Protection Act. Nonetheless, shortcomings in the pesticide regulatory process still remain. There are flaws in the testing process for pesticide approval, and not all pesticide-related consumer products are regulated under FIFRA. Furthermore, pesticides must be used exactly as directed on the label in order to prevent unintended human and

Key Recommendations

Comprehensive Chemicals Policy

- Adopt and publicize a list of chemicals of high and moderate concern, based on inherent properties of concern (such as toxicity, persistence or bioaccumulation), identified on previously published lists by authoritative government or scientific bodies;
- Establish the authority to require consumer product manufacturers to report which chemicals of high and moderate concern are present in their products, in what amounts and for what purpose;
- Develop a publicly accessible (web-based) database of readily available information that informs consumers about: the chemicals of high concern identified by the state; which products contain such chemicals; and actions consumers can take to purchase safer alternatives or reduce exposure; and
- Establish the authority to restrict the use of chemicals of high concern in consumer products when safer alternatives are available, effective and affordable.

environmental exposure. Instructions for use, storage and disposal on many product labels are difficult to read and understand, and they are printed in very small type. Improvements in pesticide label requirements are needed.

Expanded Consumer and Retailer Education

- Secure adequate funding for Board of Pesticides Control for education and outreach, pesticide use tracking, and compliance visits (with mandated IPM requirements) to educational, governmental, commercial and institutional operations
- Expand the amount of information available on MSDS that are provided to state. county, and municipal organizations under the existing authority of the Board of Occupational Safety & Health.

Maine Innovation Economy Advisory Board

With the State, consider supporting expanded efforts of the University of Maine System and private industry to become leaders in the field of Green Chemistry and the emerging potential of bio-based products.

The health costs of toxic chemicals in consumer products are significant.

Toxic chemicals in consumer products present significant risk of adverse health consequences ranging from subtle cognitive development to chronic disease and premature death. The Task Force concludes that substantial human and societal costs of disability, birth defects and disease, including health care, educational and employment-related costs, may be attributable to increasing exposures to toxic chemicals. Reducing or eliminating exposures to these chemicals by shifting to use of

Businesses want and need better information on the health impacts of chemicals in their workplace and in their products to help them create more sustainable workplaces and safer products.

lack of comprehensive and standardized information on the toxicity and ecotoxicity of most chemicals has presented challenges for companies that have developed profitable lines of safer consumer products. Material Safety data Sheets (MSdS) are the most common available source of chemical information. The primary purpose of an MSdS is to communicate hazards and protective measures to workers, but, in the absence of alternative resources, an MSdS also serves as a major source of information for businesses wishing to produce safer products and institute safer processes. For consumers, an MSdS can provide information on products. Efforts to improve MSdS would benefit many sectors.

The State of Maine leads by example: "environmentally preferable" is also proving effective and affordable.

Maine's government agencies are playing a leadership role through purchasing and using safer chemicals in product areas that are commonly used by consumers. These practices have produced cost savings and improved performance. The State should continue to purchase additional environmentally preferable products.

Growing markets for safer products will encourage innovation and provide economic opportunity for Maine.

Technological innovation is one of the keys to both the development of safer alternatives to toxic chemicals and to allowing our companies to maximize technology will supply a demand that the value of Maine's rich natural re-already exists on the part of successful source base. Green Chemistry, includ-Maine businesses committed to sustaining the development of bio-based prod-able materials, processes, and products. ucts from Maine agricultural and forest Becoming preeminent in the field of resources, offers the potential for sub-Green Chemistry is a natural for this stantial economic growth and job ex-state and its businesses. pansion in this state. This innovative technology will supply a demand that already exists on the part of successful Maine businesses committed to sustainable materials, processes, and products. Becoming preeminent in the field of Green Chemistry is a natural for this state and its businesses.

Problems viewing files? Contact Ginger Jordan-Hillier

KENNEBEC JOURNAL

KENNEBEC JOURNAL Morning Sentinel

Governor receives final report on toxic chemicals

By MEGHAN V. MALLOY

Staff Writer

12/18/07

More than a dozen Maine environmental and business officials said Monday they will continue to work with the federal government to promote the purchase and use of nontoxic chemicals.

The Task Force to Promote Safer Chemicals presented to Gov. John Baldacci the culmination of an intense 16-month study identifying chemicals that should be phased out of Maine households and businesses.

"What we have here is, I think, a pretty good start," Department of Environmental Protection Commissioner David Littell said of the final report, which prepares officials to take the next step: integrating alternative products into Maine businesses and homes.

Among task force findings was a lack of federal regulation to ensure consumers have access to environmentally safe products. The report also states that health costs have spiked in part to exposure to chemicals such as lead and pesticides.

The volume of chemical usage speaks for itself, Littell said.

In Maine alone, 2,000 pounds of lead are believed to be distributed annually throughout Maine's environment, the report said.

For example, the report said vehicles in the Maine Department of Transportation fleet have been outfitted with steel wheel balances for almost 70 years. "That's a lot of lead to be in our environment," Littell said.

Likewise, the use of pesticides have tripled in Maine in the past 15 years, according to the report.

Currently, there are more than 8,900 pesticidal products that can be legally applied in Maine. The Northern New England Poison Center confirmed 431 cases of exposure to pesticides in Maine in 2005.

"There's been a significant increase in the use of pesticides and phosphorous," Littell said after the conference. "It's rather alarming."

Task force officials praised many state-based companies.

Tom's of Maine, which sells natural hygiene products, has been working to stay environmentally-friendly for decades, director of product supply Mark Dobrovolny said.

"It's a new era of environmental sustainability," Dobrovolny said of the progress companies are trying to make by cutting back on using dangerous chemicals.

Different Drummer Workshop, a Solon-based toy shop, also was cited as a positive example for its work creating wooden toys from Maine pine trees.

"We don't put any kind of finish on our toys," owner Frank Ridley said.

"It wasn't until this year that people were looking for things made out of natural products, but I've been doing this for 35 years."

Ridley said he does not consider his business leading the way to making Maine a less-toxic state. "I do this because I enjoy doing it," he said.

The task force was established in February 2006 after Baldacci signed an executive order to study the usage of alternative chemicals.

Funding came from the state Department of Environmental Protection's budget, said Ginger Jordan-Hillier, a public service coordinator for the department.

"Gone are the days that protecting our people and environment run counter to business interests," Baldacci said as he received the report Monday.

Baldacci announced at the conference Monday he will submit a bill in the coming legislative session to address suggestions from the task force.

In the meantime, Baldacci said the administration has launched a "Green Seal" program in which environmentally friendly cleaning supplies are purchased and used in several state-owned buildings.

Efforts are also under way to determine the viability of developing an in-state facility to extract potato starch and convert it to make the same plastic-type material, Baldacci said.

The Associated Press contributed to this report.

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John Jemison: Creating Community Around Food

by Rhonda Tate

"What are we going to do when Wal-Mart doesn't exist anymore?"

I think about the question that John Jemison posed from his Orono office, overlooking the Stillwater River. He's talking about the ability of companies such as Wal-Mart to exist because our government subsidizes fuel costs for transporting products and consumers to big box stores, and such companies don't pay for the negative externalities caused by burning fossil fuels. Without such subsidies, "I am sure Wal-Mart could not stay in business," says Jemison. (See, for example, www.grist.org/comments/soapbox/2007/03/28/mitchell/)

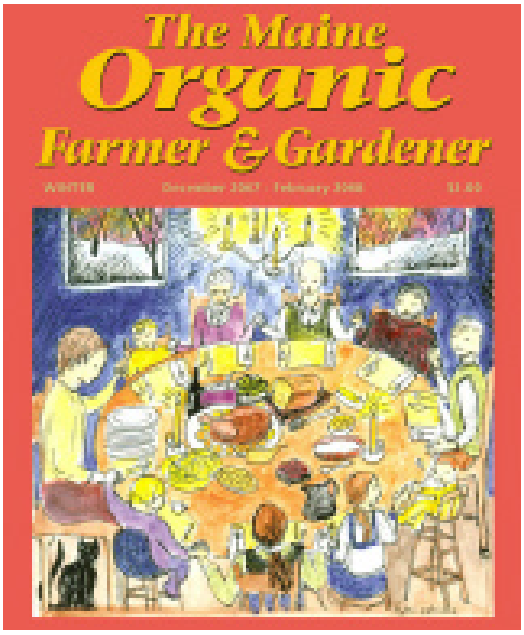
"People are just going to have to spend more money on food or grow their own," Jemison answers simply.

Spend more on food? Grow my own? I'm not a farmer ... and where does Jemison get these crazy ideas?

John Jemison says that his relationship to food changed dramatically during a sabbatical spent in Italy. He works to get more local, healthful food on more Mainers' tables, and encourages people to slow down and enjoy their food.

Apparently a trip to Italy and a lifetime of learning have convinced the water quality and soil specialist from the University of Maine Cooperative Extension that nearly everyone can garden, and that those who can't can be helped by those who can. Oh – and spending 25% of family income on food, rather than on big houses and big cars, might be the hard answer to the simple question of what we do when the Wal-Marts of the world are gone.

According to the USDA, Americans spent 9.9% of their disposable personal income on food in 2005. The figure has declined almost steadily from 23.4% in 1929. About 40% of our food dollars are now spent at restaurants and other eating places. (For comparison, while 6.1% of our disposable income is spent on food at home, figures are 8.3% for the United Kingdom, 10.9% for Germany, 13.4% for Japan, 13.6% for France, 28.3% for China and 36.7% for Russia. Note, however, that U.S. disposable income may be greater than that in some countries listed, so we may be paying a greater total amount for food, but a lower percentage.)



Easiest of Times, but not Best of Times

"We're going to look back and think that this was the easiest time," but not necessarily the best time, Jemison muses. The university professor has long been known in the world of Maine agriculture but recently has made a reputation by speaking out about the need for sustainability. A sabbatical to Italy in 2003 convinced him that we can live sustainably, and that sustainability means a lot more than recycling our cans and bottles.

"I was in Italy during the hottest summer in European history, and there was no air conditioning in the car on our way to the farm," says Jemison. For that matter, no car was driven to the farm unless all seats were occupied. According to Jemison, the Italians he worked with approached energy conservation, and life in general, in a completely different way. A town of 800 people supported a butcher, a baker, a fruit and vegetable seller and a store for sundries. "I'd visit Yolanda for my fruit and Linda for my sundries," said Jemison. "You actually knew these people."

Then he came home and realized a key component of life was missing here. “There needs to be a connection of people and food.”

Does Maine’s low population density (37 people per square mile, vs. 501 for Italy) hinder public transportation and supporting local enterprises? “Many people,” says Jemison, “argue that the dense population and short travel distances in countries like France and Italy allow effective, efficient public transportation. I think that has to be a reality.” He continues, however: “It is interesting … we are (in theory) the government. We can subsidize what we value. We could subsidize more local foods production, public transportation, but in reality government is wealth and the wealthy run government. Therefore we see what we have. The government is forever trying to kill Amtrak, and we subsidize air traffic because wealthy people generally don’t tend to be drawn to public transportation.”

Back to the Table

Italians’ connection to food spills over from their family dinner table to their communities. “Most Italian families sit down to a homemade meal once a day. How many Americans do this?” Jemison asks. “We’re not sitting down as a family and celebrating food.” About 75% of French families regularly sit down together for a meal, for example, while about one-third of U.S. families do.

Celebrate food? That’s difficult with sterilized food poured from a cardboard box and served limp from the microwave, but it’s far more likely when we know who cooked the meal, or, better yet, who grew it. “My trip to Italy completely changed my relationship with food,” says Jemison. “Now I go to the market [Orono Farmer’s Market] and Mark [Guzzi, of Peacemeal Farm in Dixmont] says, ‘Hey John, how’s it going?’” Jemison knows where his food comes from, and he wants everyone else to have this same knowledge.

Educating about Sustainability and Community

Upon returning from Italy, he offered an educational program on sustainability through Cooperative Extension. First offered in 2004, the class addressed sustainability, climate change, healthy local food systems and simple living. After four sessions and nearly 100 students, the 25-hour course is on a hiatus. “I think I bit off a little more than I could chew,” laughs Jemison.

While he and his colleagues at Cooperative Extension are revisiting the course, a legacy carries on from his past courses as a small, community garden in Orono. The sustainability course, modeled after the Master Gardener program, requires community service. The downtown Orono garden, located behind the senior center, grew from this requirement. With Jemison spearheading the effort, past students maintain the garden on land given to the project by the town, and they donate all produce to seniors in the community. Small grants from the Maine Community Foundation, the Harvest Fund and, most recently, Bridge Builders (a family foundation), as well as lots of volunteer labor, have kept the garden growing. Now this community-wide effort has other farmers kicking in extra produce to provide 5 to 8 pounds of fruits and veggies to over 50 seniors each week. Jemison himself donates extra produce from his university research plots. The garden continues to attract new volunteers and master gardeners. “We taught people how to garden organically,” explains Jemison, “and now we’ve created a community around food.”

This success with food and community has inspired Jemison to focus the next round of Cooperative Extension courses on food alone. He envisions teaching the biology of crop production so that participants understand conversations about organic versus conventional farming and genetically-engineered food crops versus genetically-engineered pharmaceutical crops.

Divergent Roles

Jemison, who comes from Memphis, Tennessee, and received his Ph.D. in agronomy and hydrogeology from Penn State in 1991, moved to Maine when he got the Cooperative Extension position that year. He has worked on water quality and agricultural production issues since then, studying, primarily, nutrient and weed management, always with the goal of saving farmers money and protecting our state's environment. In his professional roles – as an Extension professor at the University of Maine, member of the Maine Board of Pesticides Control (BPC) and of MOFGA’s board—Jemison must walk a fine line.

“We have two agricultures in Maine,” he explains. “We have the small, local, organic farm and the big, local, conventional farm.” His jobs require that he work with both. While big farms have driven agricultural policy in the past, organic farms, with the help of organizations such as MOFGA, are increasingly influential, notes Jemison.

"I love doing research at Spencer's [Spencer Aitel of Two Loons Farm], because we can work with corn seeds and then go eat lunch," says Jemison. "No protective gloves and masks needed there." There, he has been comparing yields of open-pollinated with hybrid corn – and finding little difference over four years.

Elsewhere, "I am wrapping up a four-year alternative forage crop system analysis – comparing organic corn yield, forage quality and weed density with a double crop small grain/annual grass system." The double crop system (fall small grains followed by sorghum-sudangrass) produces equivalent tonnage with about four times fewer weeds, but the overall energy produced is lower than from silage corn. Dairy farmers feed corn silage primarily for its high energy content, and thus far, that has been the weak link in the system. So he is now trialing winter small grains followed by short-season corn. He is also studying the ability of canola and of high glucosinolate mustard cover crops to reduce soil-borne pathogens in potato fields.

Jemison also sees his responsibility on the BPC and at Cooperative Extension as bringing research-based information to decision making, to help Maine's farm industry work while doing the least harm.

As a soil and water quality specialist, Jemison often sees Maine's two agricultures operating in parallel. "You will have larger dairy, potato, blueberry producers, and they will likely be working on reducing costs, but will use traditional, conventional production methods. I see my job as helping those farms remain productive and viable. The other ag seems to me to be a more personal agriculture. It is farmers' market agriculture, CSA agriculture, and on an even more personal level, gardening to support communities. My goal is to see much greater participation in this agriculture by our population.

"I want to see more open land converted to gardens that can help lower-income populations eat better (similar to our Orono Community Garden Project). Helping people realize that [gardening] is not that hard is part of my job. Another part is to educate on the importance of food in health, in local economies and in combating sprawl. My vision is that every town would have a community garden. Every town would have a farmers' market equivalent in quality to the Orono Farmers' Market. I would like to see agriculture grow in the state. It should; and with climate change, peak oil and these other factors operating, it almost has to."

Jemison maintains that his commitment is to local, organic farm systems. "Looking toward the future, I think Maine is a really good place to be. There's a lot of need, and our educational efforts are useful here." He thinks that quality food and water are two of the most important human needs. "Organic agriculture may be the best way to get people back into the kitchen, bring families around the table, and improve the overall health of Maine citizens," says Jemison, and he sees his work on MOFGA's board as helping to elevate organic agriculture. He is encouraging the conversation that is needed to transform Maine agriculture. "If we embrace change," says Jemison, "I'm confident we can make change happen."

The GE-Bt Issue

John Jemison found himself in a difficult position this summer, as the scientist on the Maine Board of Pesticides Control (BPC), trying to balance scientific research with the needs of Maine's diverse agriculture, and as a MOFGA board member. While he abstained from voting on permitting genetically-engineered Bt corn at a BPC meeting, he did suggest that the product would reduce pesticide use. "If we have a chance for growers not to use insecticides, if we have a chance to get Lorsban out of production, maybe organic farmers haven't lost," Jemison explains. Lorsban (chlorpyrifos) is a highly toxic organophosphate insecticide. While many of its uses have been canceled because of its toxicity, it is still registered for insect control (primarily of cutworms) in corn.

Jemison says that USDA food policies that support increased farm size and low-cost food put farmers under constant pressure to produce more at lower costs. He aims his research at helping them do that, but at the same time hopes to encourage strong local food systems with minimal chemical inputs. He notes that the pests that Bt corn combat can be controlled using organic methods, or they can be tolerated. With sweet corn, "most organic growers that I buy from just live with earworms. Some use crop-based oil on the silks with varying levels of success. As for borers, they use crop rotation."

To grow field corn, organic growers rotate corn every year, Jemison explains. "This reduces the potential for corn borers to build up. Most conventional growers do not rotate their field corn often. Some none at all."

The economics of using GE Bt field corn are complex, says Jemison. A farmer who currently does nothing to control insects

and then tries Bt corn will have to see whether yields increase enough to pay for the technology. A grower who is already applying an insecticide to control caterpillar pests will find that the economics are equivalent--and the farmer will not be exposed to the pesticides. ("This is my only argument for the use of Bt field corn," says Jemison.)

Regarding Bt sweet corn, "Most conventional sweet corn growers spray on a schedule based on insect pressure," says Jemison. "If you didn't have to spray, the economics [of Bt corn] look very good. The question is this: How do we get people to live with insects in their food. I do … I'll share my corn tips with earworms – a bit for them and plenty for me. But this is a difficult sell to most people."

Does Bt corn have environmental or public health costs? "I don't have a great answer to this," says Jemison. "Bt [toxin] is in the pollen and gets spread around mostly by wind; it's in the stover that remains in the field; and it's in the root system. Most research has looked at its impact on other insects and found minimal effects, generally. The bad news is, if you don't want to eat it [the Bt toxin] and you are buying sweet corn in the store from another state, chances are it could be Bt sweet corn. Your exposure to synthetic pesticides is reduced, and since we have an acid stomach, the Bt toxin crystals don't form in our stomach, and so the toxin should go through you. In the 10 years of commercial use, few real negative effects have been shown with its use. Bt corn has been coming into Maine for a decade as grain feed," Jemison adds.

MOFGA opposed registration of Bt corn varieties. The association's position on genetically engineered organisms is posted at http://mofga.org/Default.aspx?tabid=266.

While Jemison acknowledges the unknowns of genetic engineering, he notes that crops engineered for humans, such as Bt corn, are approved for the human food supply – unlike crops engineered to contain drugs for pharmaceutical companies.

"I'm very concerned about these 'pharmed' crops, because they are not necessarily meant for human consumption," says Jemison, and his research shows some level of drift in all GE crops. While he sees no way of keeping Roundup Ready crops and Bt corn out of Maine, he sees a unique opportunity for the state to prohibit "pharmed" crops.

"I would like to see the BPC and state of Maine say we are not going to do pharmaceutical crops. We have never done them and we never will." Jemison hopes other northeastern states will join Maine to create a "pharm-free" corridor. The BPC would have jurisdiction over pharmed crops only if they contained a pesticide; banning pharmed crops that don't contain pesticides would require that the Maine Legislature pass a bill to that effect.

About the author: Rhonda Tate is currently taking a break from teaching high school biology to teach her two very young sons how to walk, talk and savor good food.

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Print Page

Looking at the Maine BPC

By Megan Richardson

(Created: Monday, January 14, 2008 8:06 AM EST)

AUGUSTA — As a new legislative season begins, the Maine Board of Pesticides Control (BPC) is busy completing new laws and coming up with a list of issues to be dealt with in the coming year. For the BPC, environmental issues are at the forefront.

“Everything the board does is directed to the protection of the environment and the public health,” said BPC public information officer Paul Schlein.

The Maine BPC receiving comments on the registration of Bt corn and aerial spray drift at its July 2007 meeting. Maine was the last of the 50 states to register Bt corn, allowing it to be grown in the state. PHOTO COURTESY OF PAUL SCHLEIN

The BPC is the pesticide regulation agency connected with the Maine Department of Agriculture, Food and Rural Resources. It is made up of a seven member public board and a 14-person staff, based in Augusta. The board deals with major public policy issues, while the staff is responsible for keeping the organization running. The staff also devotes a lot of time to education. Education is one of the key tools the BPC uses to minimize reliance on pesticides in the state, which, according to Schlein, is the board’s mission. The board has programs that focus on container recycling, obsolete pesticides collection, integrated pest management, and a water quality program that was established in 1994 to protect well water from pesticide pollution. The BPC staff has also been working on its YardScaping (www.yardscaping.org) program, which teaches people how to reduce or eliminate use of lawn care pesticides.

This year the board has already completed work on several pesticide-related issues, including new rules regarding buffer zones around bodies of water in the state, making sure that pesticides are not applied to properties without owners’ consent, and Bt corn, which became a big issue in 2007.

In July of last year, the BPC voted to allow Bacillus thuringiensis (Bt) corn to be grown and sold in the state of Maine. Maine was the last state in the United States to approve Bt corn, which has been genetically modified to produce its own pesticide.

Bt corn has been a controversial issue in Maine, especially between small organic farms and larger traditional dairy farms. Organic farmers have raised concerns about crop contamination and increased insect resistance to pesticides, while traditional farmers have said that the new corn will allow them to use fewer chemicals and pesticides overall and will improve crop turnout. However, according to Schlein, there has not been any negative response to the board’s decision. Schlein said the board was able to reach a compromise that, as of now, seems to satisfy all sides. The compromise established regulations regarding buffers, product registration, and Bt-corn-specific training. The board is expected to adopt the final rule on Bt corn at its next meeting on Jan. 25.

Now that the Bt corn issues have been resolved, Schlein said the single biggest issue the board is working on this legislative season is aerial spray drift.

“The Board is considering making changes in its rules, as well as establishing best management practices

to minimize aerial spray drift and improve communication between the aerial applicators and the surrounding community," Schlein said.

STATES

Aerial pesticide spraying regulation top priority for Maine in 2008

Regulating the aerial application of pesticides is the top priority this year for the Maine Board of Pesticides Control, which hopes to address concerns regarding spray drift, notification and application site verification.

The board held a meeting last month to gather information and input from the public and the regulated community on aerial pesticide spraying, and accepted written comments until Dec. 28.

"We're all trying to work together," board spokesman Paul Schlein told *Pesticide & Toxic Chemical News*.

Aerial spraying and the resulting drift have been important topics for many years in Maine, particularly because of the state's large blueberry crop, which relies on aerial pesticide application. According to Schlein, the board has received complaints about drift and a lack of notification that the spraying is going to take place.

The board formed a stakeholder committee on aerial application about two years ago and has received several recommendations from it. After reviewing the recommendations and hearing from the public at a meeting in July 2007, the board decided to draft regulatory language in three areas — notification, spray drift management plans and verifying that the site being sprayed is the correct one.

After evaluating input from the public and stakeholders, the board hopes to finalize regulatory language on aerial spraying this year, according to Schlein. "Right now, we're trying to put all the pieces together," he said.

The Toxics Center of Maine has not yet sent comments to the board, but it was part of the initial stakeholder committee and plans to submit comments soon. According to state director Harris Parnell, aerial spraying should only be allowed if no one lives near an area undergoing spraying, but "there aren't really any fields like that."

Parnell told *PTCN* that the group helped get two of Maine's largest agribusinesses — Jasper Wyman & Son and Cherryfield Foods — to stop aerial spraying in Washington County — Maine's largest blueberry producing county.

"They switched to boom spraying and spot treatment," she said, noting that it is possible to successfully grow a crop of blueberries without aerial pesticide application.

But if aerial spraying isn't banned outright, Parnell recommended the Board of Pesticides Control put a notification system into place to alert area residents of spraying as well as require larger buffer zones to protect sensitive areas such as schools and homes from spray drift.

"If put into place, those measures would reduce the amount of aerial spray drift people are exposed to," she said. "These are not new suggestions," she added, noting that she doesn't expect the board to be "terribly receptive" to them.

Parnell said any progress made regarding a halt to aerial spraying is not going to occur at the Board of Pesticides Control because board members believe their job is to regulate aerial spraying not pass judgment on it.

According to Parnell, there have been some "small steps made." Some growers in Hancock County — another big producer of blueberries — have started to move away from aerial spraying where they can, largely because of pressure from neighboring communities.

David Bell, executive director of the state's Wild Blueberry Commission, did not respond to a request for comment by press time, but according to minutes of the board's meeting in December, "Bell pointed out that aerial spraying is important to the industry because of the hilly, rocky nature of many of Maine's blueberry fields."

Bell also noted that blueberry growers have adopted integrated pest management practices and described efforts made by the industry to inform area residents about spraying.

— Liz Buckley
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The information below came from NASDA Notes.

It appears that education and technology efforts to reduce drift are moving forward.

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AERIAL APPLICATOR DRIFT MITIGATION PROGRAM DEVELOPED BY AND FOR THE INDUSTRY

As part of a cooperative agreement with the U.S. Environmental Protection Agency's Office of Pesticide Programs, the NASDA Research Foundation (NASDARF) is pleased to announce its sponsorship of a pesticide drift mitigation and education project for aerial applicators.

Over the next two years, the NASDARF will fund the drift mitigation module as part of the professional education program being developed by the National Agricultural Aviation Association Research and Education Foundation (NAAREF) as part of their Professional Aerial Applicators Support System (PAASS). Sponsorship of this program is part of the ongoing commitment of the NASDARF to promote workplace safety through education.

The PAASS program is designed to be interactive and improve critical decision-making skills sensitive to environmental factors.

Within the industry, the PAASS program is considered the single relevant recurring training source for the modern agricultural aviation pilot and is often required by companies providing insurance to agricultural aviators. The NAAA initiated the program in 1996 as an industry-based collaborative educational effort focusing outreach to pilots and operators of aerial applicator businesses. With the primary goal of reducing the number of pesticide drift incidents from the aerial application of fertilizers and pesticides by fostering professionally sound decision-making, the PAASS program drift mitigation module is provided free of production charges to more than 1,700 applicators each year during industry regional and state conferences.

The PAASS program is developed by and for the industry. With more than 1,300 members in 46 states, the NAAA relies heavily on its membership as well as academia to generate, refine, and present the PAASS program. Members presenting the drift mitigation program attend a train-the-presenter session to assure that the material is provided in a manner consistent with promoting audience involvement. The PAASS organizers acknowledge that the educational value of the program lies is in the clear, concise, and accurate presentation of the material, and the active participation of those attending the training. Statistics show that aerial application accidents and drift incidents have notably declined since the PAASS program first hit the stage over a decade ago.

The NASDARF looks forward to working with NAAREF on this important national stewardship project and continuing this safety trend in the aerial application industry. (Contact: Dick Herrett).

The New York Times
nytimes.com

December 26, 2007

Both Sides Cite Science to Address Altered Corn

By ELISABETH ROSENTHAL

BRUSSELS — A proposal that Europe's top environment official made last month, to ban the planting of a genetically modified corn strain, sets up a bitter war within the European Union, where politicians have done their best to dance around the issue.

The environmental commissioner, Stavros Dimas, said he had based his decision squarely on scientific studies suggesting that long-term uncertainties and risks remain in planting the so-called Bt corn. But when the full European Commission takes up the matter in the next couple of months, commissioners will have to decide what mix of science, politics and trade to apply. And they will face the ambiguous limits of science when it is applied to public policy.

For a decade, the European Union has maintained itself as the last big swath of land that is mostly free of genetically modified organisms, largely by sidestepping tough questions. It kept a moratorium on the planting of crops made from genetically altered seeds while making promises of further scientific studies.

But Europe has been under increasing pressure from the World Trade Organization and the United States, which contend that there is plenty of research to show such products do not harm the environment. Therefore, they insist, normal trade rules must apply.

Science does not provide a definitive answer to the question of safety, experts say, just as science could not determine beyond a doubt how computer clocks would fare at the turn of the millennium.

"Science is being utterly abused by all sides for nonscientific purposes," said Benedikt Haerlin, head of Save Our Seeds, an environmental group in Berlin and a former member of the European Parliament. "The illusion that science will answer this overburdens it completely." He added, "It would be helpful if all sides could be frank about their social, political and economic agendas."

Mr. Dimas, a lawyer and the minister from Greece, looked at the advice provided by the European Union's scientific advisory body — which found that the corn was "unlikely" to pose a risk — but he decided there were nevertheless too many doubts to permit the modified corn.

"Commissioner Dimas has the utmost faith in science," said Barbara Helfferich, spokeswoman for the environment department. "But there are times when diverging scientific views are on the table." She

added that Mr. Dimas was acting as a “risk manager.”

Within the European scientific community, there are passionate divisions about how to apply the growing body of research concerning genetically modified crops, and in particular Bt corn. That strain is based on the naturally occurring soil bacterium Bacillus thuringiensis and mimics its production of a toxin to kill pests. The vast majority of research into such crops is conducted by, or financed by, the companies that make seeds for genetically modified organisms.

“Where everything gets polarized is the interpretation of results and how they might translate into different scenarios for the future,” said Angelika Hilbeck, an ecologist at the Swiss Federal Institute of Technology in Zurich, whose skeptical scientific work on Bt corn was cited by Mr. Dimas. “Is the glass half-empty or half-full?” she asked.

Ms. Hilbeck says that company-financed studies do not devote adequate attention to broad ripple effects that modified plants might cause, like changes to bird species or the effect of all farmers planting a single biotechnology crop. She said producers of modified organisms, like Syngenta and Monsanto, have rejected repeated requests to release seeds to researchers like herself to conduct independent studies on their effect on the environment.

In his decision, Mr. Dimas cited a dozen scientific papers in finding potential hazards in the Bt corn to butterflies and other insects.

But the European Federation of Biotechnology, an industry group, contends that the great majority of these papers show that Bt corn does not pose any environmental risk.

Many plant researchers say that Mr. Dimas ignored scientific conclusions, including those of several researchers who advised the European Union that the new corn was safe.

“We are seeing ‘advice-resistant’ politicians pursuing their own agendas,” said one researcher, who like others asked not to be identified because of his advisory role.

But Karen S. Oberhauser, a leading specialist on monarch butterflies at the University of Minnesota, said that debate and further study of Bt corn was appropriate, particularly for Europe.

“We don’t really know for sure if it’s having an effect” on ecosystems in the United States, she said, and it is hard to predict future problems. About 40 percent of corn in the United States is now the Bt variety, and it has been planted for about a decade.

“Whether Bt corn is a problem depends totally on the ecosystem — what plants are near the corn field and what insects feed on them,” Ms. Oberhauser said. “So it’s really, really important to have careful studies.”

Bt crops produce a toxin that kills pests but is also toxic to related insects, notably monarch butterflies and a number of water insects. The butterflies do not feed on corn itself, but they might feed nearby, on plants like milkweed. Because corn pollen is carried in the wind, such plants can become coated with Bt pollen.

Ms. Oberhauser said she had been worried about the effect of Bt corn on monarch butterflies in the United States after her studies showed that populations of the insect dipped from 2002 to 2004. But they have rebounded in the last three years, and she has concluded that, in the American Corn Belt, Bt corn has probably not hurt monarch butterflies.

Still, she said there was disagreement about that as well as broader causes for worry. Monarch butterflies may have been saved in the United States, she said, by a fluke of local farming practices. Year by year, farmers alternate Bt corn with a genetically modified soy seed that requires the use of a weed killer. That weed killer, Monsanto's Roundup, eliminated milkweed — the monarch's favored meal — in and around corn fields, so the butterflies went elsewhere and were no longer exposed to Bt.

"It's a problem for milkweed, but it made the risk for monarchs very small," she said.

Still, she said, other effects could emerge with time and in farming regions with other practices. For example, Bt toxin slows the maturation of butterfly caterpillars, which leaves them exposed to predators for longer periods.

"Sure, time will give you answers on these questions — and maybe show you mistakes that you should have thought about earlier," she said.

For ecologists and entomologists, a major concern is that insects could quickly become resistant to the toxin built into the corn if all farmers in a region used that corn, just as microbes affecting humans become resistant to antibiotics that are prescribed often. The pests that are killed by modified corn are only a sporadic problem and could be treated by other means.

Scientists also worry about collateral damage because Bt toxin is in wind-borne pollen. Most pollens "are highly nutritious, as they are designed to attract," Ms. Hilbeck said, wondering how a toxic pollen would affect bees, for example.

Having reviewed the science, insurance companies have been unwilling to insure Bt planting because the risks to people and the environment are too uncertain, said Duncan Currie, an international lawyer in Christchurch, New Zealand, who studies the subject.

In the United States, where almost all crops are now genetically modified, the debate is largely closed.

"I'm not saying there are no more questions to pursue, but whether it's good or bad to plant Bt corn — I think we're beyond that," said Richard L. Hellmich, a plant scientist with the Agriculture

Department who is based at Iowa State University. He noted that hundreds of studies had been done and that Bt corn could help “feed the world.”

But the scientific equation may look different in Europe, with its increasing green consciousness and strong agricultural traditions.

“Science doesn’t say on its own what to do,” said Catherine Geslain-Lanéelle, executive director of the European Food Safety Authority. She noted that while her agency had advised Mr. Dimas that Bt corn was “unlikely” to cause harm, it was still working to improve its assessment of the long-term risk to the environment.

Part of the reason that science is central to the current debate is that European law and World Trade Organization rules make it much easier for a country or a region to exclude genetically modified seeds if new scientific evidence indicates a risk. Lacking that kind of justification, a move to bar the plants would be regarded as an unfair barrier to trade, leaving the European Union open to penalties.

But the science probably will not be clear-cut enough to let the European ministers avoid that risk.

Simon Butler at the University of Reading in Britain is using computer models to predict the long-term effect of altered crops on birds and other species. But should the ministers reject Bt and other genetically modified corn?

“My work is not to judge whether G.M. is right or wrong,” he said. “It’s just to get the data out there.”

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Philip A. Oliver: Let farmers decide fate of Bt corn

Monday, January 14, 2008 - Bangor Daily News

Over the past six months a tug of war has been going on over genetically engineered, insect-resistant corn that produces what is called Bt toxin. In July, the Board of Pesticides Control approved seven varieties of Bt field corn. Since then, opponents of the products have been pressuring the board for strict rules to protect organic growers. In a recent column "Rights and responsibilities of Bt corn" (BDN, Dec. 13), Logan Perkins — with a group called Protect Maine Farmers — wrote that strong rules and buffer zones were necessary to protect organic farmers from contamination. Though some organic farmers may agree, not all of us do.

I'm an organic-dairy farmer. I produce organic milk because it is one way for small dairy-farms in Maine to stay in business. Maine has the highest percentage of organic-dairy farms in the nation. Organic-dairy farming is the fastest growing agricultural segment in New England. The promise of higher and more stable prices for organic milk is driving growth in organic-dairy farming.

Yet, all is not rosy. In 2004, according to a report published by the Maine Organic Farmers and Gardeners Association, farms selling organic milk were paid $22.97 per hundredweight. Farms selling conventional milk recovered $18.07 per cwt. However, half of the higher price for organic milk was wiped out by higher production costs. Only one third of the farms in MOFGA's study were profitable.

It may seem like a contradiction, but the precarious situation with organic-dairy farms is why I support growing Bt corn in Maine. To stay in business, farmers have to make tough choices — which crops to plant, which production methods to use. The more options a farmer has, the more likely he is to find products and methods that will keep the farm going. For some farmers the choice is to grow genetically engineered crops. It's not my choice, but I respect their right to grow them. Any technology available to farmers in other states should be available to Maine farmers, without miles of red tape.

Some say organic farmers and farmers who plant genetically engineered crops cannot co-exist in Maine. Nonsense. For nearly 10 years conventional dairy farmers in Maine have been planting genetically engineered, herbicide-tolerant corn. A plan for co-existence was adopted by the Maine Department of Agriculture to encourage farmers planting genetically engineered crops to work out any conflicts with farmers not planting them. As far as I know the plan is working and no complaints have been made to the department.

Part of the problem for Maine farmers, both conventional and organic, is that well meaning people who don't farm for a living sometimes find certain farming practices offensive. They go to their selectmen and try to get ordinances passed. When that doesn't work they go to the Legislature. Usually our elected officials come down squarely on the side of farmers. But not always.

Neighboring farmers who have different ideas on how to farm have a way of working out their differences — they talk to each other, neighbor to neighbor. Most differences can be worked out — a little compromise here, a little change there. That's how we've been doing it for generations.

As for the people who don't farm for a living but think they know how we should run our farms: try running a farm for a while.

Philip A. Oliver owns and operates Blind Faith Farm in Palmyra.

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THE PLAIN DEALER

Low-grow (even no-mow) lawns tested by city

Tuesday, January 01, 2008

Michael Scott
Plain Dealer Reporter

Don't toss out your Toro or fire the landscapers just yet, but get ready for the next thing in green living by next summer: Low-mow (even no-mow) lawns.

Yep, the green revolution is sowing seeds of environmental change even among the lush, green grasses of suburbia.

Low-mow -- and its even more ecologically minded brother, no-mow -- refer to limited-growth grass seed mixes. The seeds grow into lawns that need less water, need no fertilizers or weed killer and stay reasonably short, 6 to 8 inches, even if mowed only once a month or less.

They're already taking root in Cleveland.

The Cleveland Botanical Garden and several city departments are testing a handful of low-growth grass mixes -- some already available, while others are new mixes developed at the garden. The grasses would be planted initially only in city-owned vacant lots.

Five mixes sprouted with mixed results when planted in pilot strips last summer in front of the Botanical Garden's East Boulevard building. The most promising blend topped off between 6 and 8 inches high when being cut only once a month.

Other Northeast Ohio lawns probably grew that much in a single week this past summer when the rains came.

Supporters say that's what will make these low-mow grasses an increasingly popular option, even though some disdain their small flowers, and most varieties look shaggier than well-manicured yards.

"The perfect American lawn is going through a volatile period in its history," said Case Western Reserve University environmental history professor Ted Steinberg of Shaker Heights. "Of course, I'm the guy who thinks any lawn maintenance is a waste of time."

Steinberg, author of "American Green: The Obsessive Quest for the Perfect Lawn," said there is "an anti-perfect lawn revolution under way in Canada. " He said more than 120 cities there have enacted limits on the use of pesticides on yards, for example.

He said low-mow lawns are part of that larger movement away from chemically supported and perfect-looking lawns.

The test lawn outside the garden certainly drew plenty of attention around University Circle this past summer, said Christin DeJong, the Garden's urban botanist, who is running the experiment.

"The Cleveland Botanical Garden's mission is - in every sense of the word - conservation," said Garden Executive Director Natalie Ronayne. "This project can play a role in urban greening, which improves sustainability and helps in economic development. It's more aesthetically pleasing and easier to market a green city."

The low-mow lawn test will continue through next spring on four parcels in the city's Fairfax neighborhood.

Contractors for the city planted the new seed mix on half of each of the bare-dirt lots. The other half got a traditional, faster-growing lawn mix.

City workers will mow it monthly next summer and measure the height difference each time between the two sides.

Ultimately, the grass could be used to reseed many of the city's 8,000 parcels of available land.

"That's the bottom line with us - if it saves money on maintenance," said Nate Hoelzel, the city's brownfields program manager. "Green lots help a neighborhood more than plain dirt."

Ronayne and Hoelzel said they could envision the low-grow also being marketed to park systems and maybe the Ohio Department of Transportation for median strips. Because none of the mixes include taller - and hardier - grasses like rye, they won't hold up under heavy traffic, DeJong said.

Landscapers who make part of their living mowing others' lawns aren't too worried - yet.

"Quite honestly, it's really not on our radar at this time," said Sandy Munley, executive director of the Ohio Landscape Association in Broadview Heights. "It sounds pretty cool for some uses, but I think it would depend on what it looks like and feels underfoot."

Brad Copley, vice president of marketing for MTD Products, Ohio's largest lawn care equipment manufacturer, said his company would welcome the idea.

"I don't think this is the end of lawnmowers as we know it," he said, laughing. "Anything that would contribute to the greening of the landscape and the generation of more oxygen - as opposed to concrete or asphalt - is a good thing."

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Vol. 12 Issue 4, Fall 2007

Reducing the Risks of Golf Course Management

The Ribbon

By Jennifer A. Grant, NYS IPM Program and Frank S. Rossi, Department of Horticulture, Cornell University

Golf course superintendents, owners and staff are motivated to reduce pesticide use due to pending regulation, economic factors, and their own environmental consciousness. However, golf turf managers faced with operating facilities with fewer pesticides need the best information on course conditioning that is less reliant on chemical pesticides and also meets golf client expectations. At the same time, those advocating pesticide restrictions need to be aware of the costs of implementing the policies and the resulting impacts on revenues in the case of widespread turf loss. In an effort to address the environmental, economic and practical aspects of pesticide restriction we are exploring golf turf management with little to no chemical pesticides.

Frank Rossi, Jennifer Grant, and Andy Wilson, Supervisor of the Green Course at Bethpage State Park, make an early season visit to the course.

Our approach has been to compare traditional putting green management to a strict IPM approach and to biologically-based, reduced-risk management. We chose putting greens because they are the most intensively managed golf course areas, have the highest quality expectations, and will therefore be the most difficult to manage without chemical pesticides.

A primary focus of our work is to reduce the plant stress associated with putting green management that often leads to pest problems. These stress-reducing strategies include altered mowing, watering and feeding practices. They result in turfgrass that is sometimes poor in visual quality, but meets the playability standards of the game.

Our project is unique for many reasons. We look at the full suite of management practices performed on a golf course—not just one aspect, and our research site is an operational golf course. The Green Course at Bethpage State Park on Long Island is a high-use public course, getting 50,000 rounds of play each year.

The project is long term—we're just completing our seventh year. It's an experiment using full putting greens as experimental units, and it also serves as a demonstration to the many thousands of golfers who play the course each year.

What have we learned?

Diseases, caused by fungi similar to organisms that cause athlete's foot, are the main pest problems on putting greens. These organisms attack weakened, stressed grass more easily and severely than healthy, non-stressed plants. In the early years, we managed six greens without pesticides (no EPA-classified I, II, or III chemical

pesticides). The greens, composed of creeping bentgrass and annual bluegrass (Poa annua), eventually became unplayable and died each year from the intense heat and humidity of increasingly warmer Northeastern summers. Three of the greens were converted to a more disease-resistant grass species, velvet bentgrass, but have also proven to be difficult to manage without chemical pesticides.

We conceded that for these older surfaces that had been treated with chemical pesticides for more than 30 years, nonchemical management was not sustainable given the current technology and negative impact on revenue from reduced golfer play. Consequently, we modified the management of these greens to "reduced risk"—incorporating low-risk chemical pesticides. Reduced risk pesticides have characteristics such as very low toxicity to humans and non-target organisms including fish and birds, low risk of groundwater contamination or runoff, low potential for pesticide resistance, and demonstrated efficacy and compatibility with IPM.

Throughout the project, we have been able to apply fewer chemical pesticides on the IPM and reduced-risk (or nonchemical) greens as compared to traditionally managed greens. The IPM greens have consistently received 30-60% fewer applications, while maintaining equal quality. However, numbers of applications do not tell the full story. Numbers of pesticide applications are easily compared, but they reveal nothing about the qualitative effect of these pesticides. As traditional chemical pesticide applications have decreased, reduced-risk and biological product use has increased. So how can we tell which products are "better" to use, and when we are improving?

To address this predicament, we incorporated the "Environmental Impact Quotient" (EIQ) (Kovach et al. 1992), to both select low-impact pest management products and to evaluate the relative effect of our various management regimes. The EIQ model provides information on pesticide effects on non-target organisms, applicators and golfers. The superintendent chooses the lowest risk product amongst the legal products expected to be effective under the specific circumstances encountered. In comparing management strategies, we use the EIQ to evaluate the effect of each approach. From 2004 to 2006, the environmental impact of the IPM and reduced-risk treatments have been up to 85% less than that of the conventionally managed greens (See Figure 1).

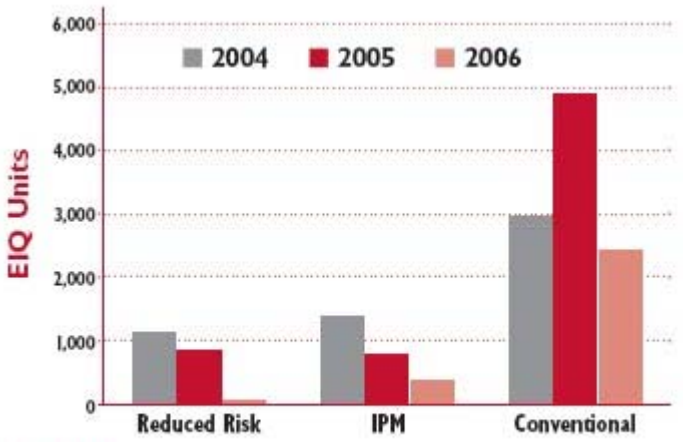

Figure 1. *Environmental Impact of Pesticide Applications, expressed as Field EIQ*

The quality of the IPM greens has equaled that of the conventionally managed greens, almost without exception throughout the seven years of our study. Quality of the reduced-risk greens has been acceptable, if not equal to conventional, through most seasons, with the common exception of approximately one month during the hottest weather each year. Golfer surveys have further attested to the quality, with all treatments rated as good to very good, with few exceptions from 2003-2006. It appears, to date, as though we are getting closer to meeting our environmental and economic goals.

Where will we go from here?

Perhaps most important in this project is that we have developed a suite of reduced-risk practices that is feasible for use on public golf courses in New York State. We have seen our "experimental" practices begin to be implemented on the other courses at Bethpage and we look forward to more widespread implementation. We plan to produce an operations manual that can be used as a guide throughout the Northeast by other courses interested in reducing their dependence on chemical pesticides. At the same time, we will continue testing new products and practices for environmentally compatible golf course management.

Further reading

A more detailed discussion of methodology and results from 2001 through 2003 can be found at http://usgatero.msu.edu/, and the 2004-2006 reports at http://nysipm.cornell.edu/grantspgm/projects/default.asp

Acknowledgements

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Reference:

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Last Update 12.11.07

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SOURCE: The Freedonia Group, Inc.

Jan 14, 2008 10:50 ET

US Demand for Home & Garden Pesticides to Reach $1.7 Billion in 2011

CLEVELAND, OH--(Marketwire - January 14, 2008) - US demand for home and garden pesticides (sometimes referred to as consumer pesticides) is projected to increase 4.8 percent per year to $1.7 billion in 2011. Gains will rebound from a difficult period, which was characterized by slow volume growth and price declines in the first years of the decade. Although most leading active ingredients have maintained their market presence for years, new product introductions -- featuring more convenient packaging, safety features, or different formulations, such as ready-to-use and superconcentrated versions -- will boost demand. These and other trends, including market share, demand and company profiles, are presented in "Home & Garden Pesticides," a new study from The Freedonia Group, Inc., a Cleveland-based industry market research firm.

Highlighted Links

The Freedonia Group, Inc.

Home & Garden Pesticides study

Insecticides are by far the largest product category in the home and garden pesticide market, accounting for almost 60 percent of overall demand in 2006. This is due in part to the large household category, but also because insecticides are the only category of pesticides widely used in both household and lawn and garden applications. Herbicides, the leading product category in lawn and garden applications, is expected to register somewhat slower growth due to continued reliance on established products. Fungicides and other products account for a relatively small share of overall demand, but are expected to register faster than average growth due to the increasing market presence of specialized repellents and the greater use of more sophisticated fungicide products to address lawn diseases.

Household applications, which account for a majority of overall demand, are projected to register faster growth than lawn and garden applications. Among the reasons for this faster growth is the resurgent insect repellent segment. Once thought more or less mature, the insect repellent segment has been re-energized by heightened awareness of West Nile virus and other insectborne pathogens.

The Freedonia Group is a leading international business research company, founded in 1985, that publishes more than 100 industry research studies annually. This industry analysis provides an unbiased outlook and a reliable assessment of an industry and includes product and market forecasts, industry trends, demand history, threats and opportunities, competitive strategies, market share determinations and company profiles. More than 90% of the industrial companies in the Fortune 500 use Freedonia research to help with their strategic planning.

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At hotels, it's dog vs. bedbug

The Boston Globe

Canine patrols make sure guests won't get the itch to complain

By Nicole C. Wong, Globe Staff | January 3, 2008

In the 3 1/2 years it's been open, Jurys Boston Hotel has never found bedbugs on its premises, nor have its guests complained about being bitten. Still, the luxury hotel in the Back Bay began dispatching a bedbug-sniffing dog to each of its 225 guest rooms last year.

And when the canine detective barked, after detecting the suspicious scent of the itch-inducing insects or their eggs, the hotel fumigated two rooms and burned the mattresses.

"At the first sign or suggestion of a problem, our reaction would be to treat the room with chemicals, no questions asked," said general manager Stephen Johnston, who calls the dog in every three months.

Hotels are intensifying their efforts to quash the wingless insects, which were nearly eradicated in the United States a half-century ago but are again becoming a nuisance.

Scientists aren't sure why bedbugs - which hitchhike to new homes on luggage and clothing - have been resurging, but they suspect the proliferation of international travel and the dwindling potency of insecticides.

Bedbugs don't signal unsanitary living conditions or transmit diseases, but hotels don't want to be bitten by bad publicity when upset guests vent on blogs or online social networks.

Reliable data are hard to find, since public agencies aren't notified about infestations. But the exterminator Orkin Inc. said it treated buildings for bedbugs in 48 states in 2005, up from 43 states in 2004 and 35 states in 2003.

Orkin's branch serving hotels and other nonresidential buildings in Greater Boston reported that it sprayed, steamed, and vacuumed bedbugs 25 percent more per month in 2007 than in 2006, on average.

Still, the American Hotel & Lodging Association estimates the percentage of guests who encounter bedbugs is minuscule, given that 4 million people sleep in lodging establishments nightly.

The association's chief executive, Joe McInerney, said he doesn't believe the insects - which can thrive for a year between one-bite meals on the blood of living hosts - were almost wiped out when the pesticide DDT was widely used after World War II.

"You always had it, but nobody reported it," said McInerney, who has worked in the lodging industry for more than 45 years.

Now, the word about bedbugs gets out in other ways.

According to an online survey of 1,052 travelers in the United States that Acromatics conducted for Orkin in April, half said they would gripe about being bitten to at least five people. It's also easy to complain to a large audience through websites like TripAdvisor.com, where customers can post reviews about hotels and motels.

But some travelers don't stop at complaining - they sue. That's what Jonathan and Lori McLelland of Ringewood, N.J., did after allegedly suffering bedbug bites during a two-night stay at the Boston Park Plaza Hotel & Towers in October. The Park Plaza did not respond to repeated requests for a comment.

Jurys isn't the only hotel to take a proactive approach to bedbugs. The Omni Parker House brings in an insect-sniffing mixed Labrador from Advanced K9 Detectives LLC, the same Milford, Conn., firm that Jurys and about 10 other Boston-area hotels use. The Omni's general manager, John Murtha, is also considering buying special encasements for mattresses and box springs to prevent bedbugs from building homes on them.

Scientists are trying to find ways to fight the bugs, too. The Entomological Society of America's annual conference, held in San Diego last month, featured three half-day symposiums on the insects, with nearly 30 scientific presentations on topics like "How bedbugs survive long xeric periods between blood meals" and "The effect of sex-ratio on dispersal and aggregation behavior of the common bedbug."

Three years ago, no one at the conference presented any bedbug research.

It's a significant shift, said Richard Cooper, an entomologist and technical director of Cooper Pest Solutions, because "if you understand everything about what makes an organism tick, that enables you to look for links in its lifecycle and behavior that can be attacked."

Judith Black, technical director at Steritech Group Inc., a pest-control company that serves the hospitality industry, found only 0.6 percent of the almost 76,000 rooms the company inspected between November 2002 and April 2006 needed to be treated for bedbugs, but those infestations were spread across 24.4 percent of the nearly 700 US hotels it studied.

"The unfortunate thing is today we don't have a baited trap for bedbugs," said Richard Pollack, a medical entomologist at Harvard University's School of Public Health. He's researching how bedbugs find their hosts.

For the past year, Pollack has let hundreds of laboratory bedbugs chow down on his arm to keep his research specimen thriving - and to cut the time, money, and paperwork required to feed them animal blood through an artificial membrane.

So he knows firsthand that, contrary to rumor and imagination, you can't feel the creepy crawlers bite. Which is good, he said, since for now "you are the best attractant."

Nicole C. Wong can be reached at nwong@globe.com. ■

From HealthNewsDigest.com

Safety
National Pesticide Hotline Provides Information In More Than 170 Languages
By
Dec 14, 2007 - 8:43:22 AM

National Pesticide Hotline Provides Information In More Than 170 Languages

(HealthNewsDigest.com) - CORVALLIS, Ore. - The National Pesticide Information Center (NPIC) at Oregon State University receives more than 24,000 questions each year from all 50 states and several countries. Now a new agreement means that NPIC can handle pesticide questions in more than 170 different languages.

Since coming to OSU in 1995, NPIC has helped thousands of callers with questions that range from pesticide contamination of well water to the effects of chemicals on human and animal health.

A new agreement with Language Line Services connects NPIC with staff trained in medical and scientific terminology and can be accessed 24 hours a day for translations in real-time in more than 170 languages, including Mandarin, Russian, Farsi, and more.

"This new service makes it possible to reach many underserved populations," said Dave Stone, an assistant professor in OSU's Department of Environmental and Molecular Toxicology and the new director of NPIC. Prior to joining OSU, Stone was the public health toxicologist at the Oregon Department of Health.

The National Pesticide Information Center, a cooperative effort between OSU and the Environmental Protection Agency, provides science-based information about pesticide toxicology, safe and legal use of pesticides, environmental impacts and regulation to the general public, medical community, government officials and applicators.

"Whether you're in the city or on a farm, whether you're combating cockroaches or weeds, whether you're a homeowner, physician or pesticide applicator, you can get objective information about pesticides," Stone said.

"Our trained pesticide specialists are on the front line of risk communication," he added. "If we assist someone in how to reduce exposure or properly use a product, we've done our job."

In addition, NPIC has unveiled a new website (www.npic.orst.edu) that features fact sheets for pesticide active ingredients, case profiles, resources for integrated pest management, a guide for West Nile Virus and links to helpful resources.

For more information on NPIC or assistance with pesticide related questions, call NPIC at 1-800-858-PEST or e-mail at npic@ace.orst.edu.

www.HealthNewsDigest.com

EPA Rejects New Pesticide Industry Push For Container Recycling Rule

Pesticide manufacturers are turning up the heat in their years-long effort to push EPA to issue a rule requiring recycling of empty pesticide containers, a rule that a key pesticide industry trade association says is critical to save the group's collapsing voluntary program.

However, EPA officials say they are still studying the issue and are also considering other "mechanisms" to address the containers.

CropLife America, which represents agricultural chemical producers, is urging EPA to commit to issue a final rule in time for the next agricultural growing season. The group's president, Jay Vroom, recently met with EPA Administrator Stephen Johnson to urge him to commit to issue the rule. The group is also conducting a study to present to EPA demonstrating the relative environmental benefits of pesticide container recycling.

Without a viable national recycling system, a CropLife spokesman says, pesticide containers might have to be recycled at municipal plants that do not employ technicians who specialize in disposal of such hazardous waste. Containers might remain on farms for long periods of time, increasing the risks of pesticides leaching into groundwater, he says.

At issue is CropLife's voluntary recycling program known as the Ag Container Recycling Council (ACRC). CropLife members, who are required to fund the voluntary recycling group, are concerned that they are subsidizing recycling for non-paying competitors.

CropLife has warned for some time that the voluntary recycling program is in danger of collapse because the program collects the containers from farmers, whether or not the relevant manufacturer contributes toward the recycling costs. "There are those out there who, in a sense, are getting a free ride," says the CropLife spokesman.

In an effort to force companies into the program, CropLife officials have been urging EPA to issue a rule mandating recycling -- a move they hope will force non-paying companies into their voluntary program.
"Without such a rule, the voluntary program is headed for collapse,"
Vroom said in a Nov. 27 statement.

Vroom says the group has "failed" to get non-paying companies that benefit from the program to contribute toward the recycling program's costs. "Our efforts to get all pesticide registrants to pay their fair share of the cost of voluntary programs have failed," he added in the statement.

The group has long urged EPA to require recycling, asking the agency in
2005 to include the requirements in a container containment rule.
However, agency officials did not include the recycling requirement in its August 2006 containment rule, saying they feared it could delay the release of a rule they had sought to promulgate for 20 years.

Language in the House version of EPA's fiscal year 2007 appropriations bill called on the agency to issue a rule creating a national pesticide container reuse plan, and EPA subsequently announced that it would develop such a regulation. However, the bill was never signed into law and EPA is declining to commit to issue the rule now sought by industry.

Now CropLife officials are urging EPA to publish a proposed rule in the Federal Register by Jan. 15, aiming to finalize the rule by July 15, 2008, according to a Nov. 15 letter Vroom sent to Johnson. Vroom says in the letter that concerns raised in a prior meeting between the two in May have been largely resolved.

The CropLife spokesman says that the tight timetable is designed to allow recycling to be made mandatory in time for next year's growing season -- although growing seasons vary by crop and region.

However, EPA says it is unlikely to grant the group’s request and is still working to consider the appropriate next steps. EPA says in a statement to Inside EPA that the agency is still collecting data, preparing analyses and considering “various options” to determine the “best mechanism” for proceeding.

The CropLife spokesman says agency officials are concerned that mandating recycling for pesticide containers could set a precedent by requiring recycling for a single product, and could open the door to similar requirements for other products -- a move the agency opposes.

The spokesman says agency officials have also questioned their legal authority to act and have raised concerns that mandating recycling for the so-called one-way plastic pesticide containers might open the door to similar requirements for other products -- something the spokesman says EPA is seeking to avoid.

However, the spokesman says industry officials believe section 19 of the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA) gives the agency authority to develop regulations mandating recycling. Section 19(e)(1)(B)(iii) requires EPA to develop regulations that ensure “to the fullest extent practicable . . . the safe disposal of the containers.”

With precise legal drafting, EPA can avoid opening up any broader debate on recycling, says the spokesman, who believes that EPA has a clear mandate to act under FIFRA.

The group is also preparing a study to examine the environmental cost of incinerating empty pesticide containers, highlighting the material lost that could otherwise be recycled. The CropLife spokesman, however, says that these studies are in the early planning stages, and contracts are still being negotiated to conduct the necessary work with Mississippi State University and an EPA trail burn laboratory at Research Triangle Park, NC.

EPA says that it is awaiting the results of a study that CropLife and ACRC are preparing on the environmental benefits of pesticide container recycling. “The agency looks forward to receiving the study results and will consider them along with any other relevant information in determining EPA’s proper role in promoting recycling efforts,” says EPA.

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US

Pesticides to Carry Celebrity Plugs and Charity Promotions - EPA Set to OK Marketing Tie-Ins on Labels Once Limited to Safe Usage Information

Author: Public Employees for Environmental Responsibility (PEER)
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The U.S. Environmental Protection Agency is proposing to allow pesticide manufacturers to display "third-party endorsements" and charitable tie-ins on their labels. Until now, such promotional marketing has been forbidden, with the pesticide labels devoted to safe usage directions.

EPA would approve each marketing claim on a case-by-case basis, thus entangling the agency in the design of corporate campaigns, according to comments filed today by Public Employees for Environmental Responsibility (PEER). A pesticide label is a legal document and EPA strictly regulates label content on insecticides, herbicides, rat poisons, fungicides and anti-microbial agents, including bleach, to ensure that usage information is clear and complete. But now EPA is saying that endorsements and charitable pitches can compete for space with safety instructions and hazard warnings.

Misuse of pesticides, however, is a major public health problem. The most recent report from the American Association of Poison Control Centers finds that pesticides are the eighth most frequent cause of calls to poison centers, accounting for more than 100,000 exposures a year, nearly half of which involve children younger than six years old.

"The only symbol that should be on these products is the skull and crossbones - not the Red Cross, or a NASCAR driver, a smiling dolphin or pretty flowers," stated PEER Executive Director Jeff Ruch. "Even as pesticides poison our rivers and cause male fish to ovulate, EPA will help the main culprits swathe their products in claims that your purchase helps the environment in some phony baloney way."

Under the plan, pesticides and other regulated poisons could feature endorsements from celebrities or prominent groups as well as tie-ins with charities on product packaging. Earlier this year, EPA bowed to a request from the Clorox Company to display the Red Cross symbol in advertising a pledge to donate a small percentage of the retail purchase price of its bleach products to the charity. After agreeing to make an exception for Clorox, EPA now wants to transform that exception into the rule.

EPA's plan, which is open for public comment until December 31, has already drawn objections from the Association of American Pesticide Control Officers Association on the basis that such promotional claims "could mislead, be misinterpreted, or be falsely offering assurances of safety…" In addition -

* Attorneys General from seven states (New York, Illinois, Connecticut, Maryland, Vermont, Oklahoma and Arizona) have called on EPA to retract the Clorox-Red Cross label. In addition, the State of Minnesota has indicated that it will not allow the Clorox-Red Cross label;

* EPA's action appears to contradict its own guidelines which discourage any "symbols implying safety or non-toxicity, such as a Red Cross or a medical seal of approval (caduceus)"; and

* EPA will give conditional approval for labels even when the agency has "some residual concern" about consumer confusion.

"EPA claims it does not have the time or resources to address issues ranging from global warming to lead-based paint protections for kids yet it is willing to lavish attention on pesticide promotions," added Ruch, noting that agency employees complain that EPA has come to mean "Encouraging Pesticide Applications" under Administrator Stephen Johnson. "This plan uses tax dollars to assist commercial interests at the possible expense of public health and the environment."

Significantly, EPA cites the case made by Clorox as one basis for its proposal but still has not released those communications to PEER under a Freedom of Information Act request the group filed back on January 27, 2007.

washingtonpost.com

High Weedkiller Levels Found in River Checks

By Juliet Eilperin
Washington Post Staff Writer
Sunday, December 9, 2007; A06

Atrazine, the second most widely used weedkiller in the country, is showing up in some streams and rivers at levels high enough to potentially harm amphibians, fish and aquatic ecosystems, according to the findings of an extensive Environmental Protection Agency database that has not been made public.

The analysis -- conducted by the chemical's manufacturer, Syngenta Crop Protection -- suggests that atrazine has entered streams and rivers in the Midwest at a rate that could harm those ecosystems, several scientific experts said. In two Missouri watersheds, the level of atrazine spiked to reach a "level of concern" in both 2004 and 2005, according to the EPA, and an Indiana watershed exceeded the threshold in 2005.

Much of the data on atrazine levels has remained private because Syngenta's survey of 40 U.S. watersheds was done in connection with the EPA's 2006 decision to renew its approval of the pesticide. The Washington Post obtained the documents from the Natural Resources News Service, a District-based nonprofit group focused on environmental issues.

Atrazine has been linked to sexual abnormalities in frogs and fish in several scientific studies, but the EPA ruled in September that the evidence was not sufficiently compelling to restrict use of the pesticide. EPA spokeswoman Jennifer Wood said the agency "has concluded that atrazine does not adversely affect gonadal development in frogs, based on a thorough review of 19 laboratory and field studies, including studies submitted by [Syngenta] and others in the public literature."

The pesticide is popular among corn and sorghum farmers despite the controversy because it is inexpensive and blocks photosynthesis, thus killing plants to which it is applied.

"It works and it's inexpensive, and that's what farmers love," said Tim Pastoor, head of toxicology at Syngenta. "It's magic for them. It's like the aspirin of crop protection."

EPA officials and independent experts spent last week in meetings in Arlington, debating the "ecological significance" of atrazine water contamination, according to agency documents. The results of the deliberations -- the monitoring data was plugged into computer models to estimate the effects on ecosystems -- will be published in several weeks and will help determine how EPA officials regulate the pesticide in the future.

The federal government first approved atrazine in the 1950s, but it came under increased scrutiny in the late 1990s after Tyrone B. Hayes, a professor of integrative biology at the University of California at Berkeley, did a series of studies -- first for chemical companies and then on his own -- that indicated that tiny amounts of the pesticide de-masculinized tadpoles of African clawed frogs. The European Union declared it a harmful "endocrine disrupter" and banned it as of 2005, but the EPA decided to allow its continued use after determining that the agency lacked a standard test for measuring the hormone-disrupting effects of chemicals.

Instead, EPA officials and company representatives agreed on a plan to monitor atrazine levels in "40 of the most vulnerable watersheds in the country," said Jim Jones, deputy assistant administrator for the EPA's Office of Prevention, Pesticides, and Toxic Substances.

Syngenta has collected more than 10,000 samples since 2004, Pastoor said, taking readings at least every four days at each site.

Jones said there are limits on what details of the Syngenta survey can be released to the public -- the company claims some of the data is proprietary information, and anyone who requests the information must pledge not to share it with competing pesticide companies -- but the monitoring system is protecting the public's health.

Nancy Golden, a biologist and toxicologist at the U.S. Fish and Wildlife Service who studies how chemicals affect aquatic creatures, said fish exposed to as little as 0.5 parts per billion of atrazine in the lab demonstrate behavioral problems. At higher levels, they experience stunted growth. The levels of atrazine in 2004 in the two Missouri sites were more than 100 times the 0.5 parts per billion concentration, the Syngenta data show.

Golden said the data documented "atrazine levels that are sustained at pretty high levels for several weeks. That's definitely a cause for concern."

Peter L. deFur, a biologist at Virginia Commonwealth University, said "chronic low-level exposure" to atrazine can harm aquatic life. "I don't think low levels of atrazine exposures are safe," deFur said.

Charles Scott, field supervisor for the Fish and Wildlife Service's Missouri Ecological Services Field Office, said high levels of atrazine in northeastern Missouri could potentially affect several endangered and threatened species, including the pallid sturgeon, the Higgins' eye mussel, the fat pocketbook mussel and the decurrent false aster, a wetland plant. "It has a lot of biological impacts," Scott said of the pesticide.

The EPA has asked Syngenta to do additional monitoring at the two sites in northeastern Missouri where atrazine concentrations significantly exceeded 10 parts per billion, the level at which the agency believes it can impact aquatic systems. In these two watersheds, concentrations reached more than 50 parts per billion for days at a time.

Wood, the EPA spokeswoman, said the Indiana watershed did not trigger the agency's level of concern in 2006 and the company will be monitoring it for another year.

Pastoor, who noted that atrazine's effect of stunting plant growth is reversed as soon as the pesticide is taken away, said the fact that two watersheds showed high levels of exposure "doesn't mean there's a problem there. It just means there's a yellow flag that says you should take a look."

The two sites in question, he added, were prone to excessive runoff because they have an impervious clay soil that channels runoff into waterways, the land is sloped, and one of the farmers working the land had cleared much of the vegetation. Syngenta sales agents and local corn growers are trying to reform the practices of the farmer in question.

"We anticipate that site will significantly improve," Pastoor said, adding that the computer models Syngenta ran suggest there has been no ecological damage to the watersheds the company has monitored.

Hayes, who stopped working as a contractor for a coalition of chemical companies years ago and is now one of atrazine's most vocal opponents, said he does not think the federal government is surveying the pesticide enough in light of its pervasive influence.

"What's most disturbing about the information you're talking about is all that EPA requires Syngenta to do is monitor atrazine in a few key sites," Hayes said. "Industry's been allowed to have such a huge hand in the regulation of atrazine."