

INTERNS AND EMPLOYEES

During the course of a year I usually get several requests to look for students who would be good workers on cranberry marshes. I'm pleased that the industry is looking to the university to find bright people who are trained in the basics of crop production. Let me suggest a couple of items that would improve our ability to attract students who would be good marsh workers.

First, I don't teach undergraduate classes so I don't interact with many undergraduate students. So, I'm not the best resource to know if there are students who would be good marsh workers. Second, few students think of the cranberry industry as a potential employer. The reason for that is there are few cranberry industry jobs listed in the College job placement center files. If you do have a job open, please send me a copy of the description on your company letterhead and I will make sure it gets to the right place.

One way to attract good employees is to offer a summer internship. Through internships students get first hand exposure to the industry and they can earn credit for their work. Perhaps most importantly, they get the chance to see if they like working in the industry and you get the chance to look at potential employees without making a permanent commitment. If the intern is not who you are looking for you don't have to invite them back. If they work out well you'll have a trained employee following graduation.

The common error in offering internships is to get the information to Madison too late. Students begin looking for summer internships as soon as the second semester

begins. If you're considering offering an internship (and I hope some of you are), please send me three copies of your internship announcement and I'll see that they get listed in the right place. If you'll do this before the end of January your chances of attracting a qualified intern are greatly enhanced.

I hope that working together we can attract the educated workers the cranberry industry requires to remain healthy and vibrant.

Teryl Roper
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REPORTING ORBIT USE

The section 18 permit for the fungicide ORBIT (propiconazole) expired on July 31, and now is the time to report use of this product in Wisconsin. All cranberry growers in Wisconsin should have received a form to record their use of ORBIT. If you used ORBIT, you **MUST** provide the information requested on the form and return it to me (my address is on the form) no later than September 5, 1997. Reporting ORBIT use is required by the EPA, and future Section 18 or regular labels for ORBIT will not happen if we don't provide them with use data.

Reporting Funginex (triforine) use is not required by EPA, but this information would be useful to the Cranberry Institute and me as we document fungicide use for control of cottonball.

If you have questions about reporting fungicide use, call me at 608-265-2041. I will be away from my office August 6-13 and again August 18-21.

Patty McManus, UW-Madison, Extension Plant Pathologist

STUNNING EXAMPLE OF PESTICIDE MISUSE

Chris Boerboom, Extension Weed Scientist

During the past several months, an incredible case of illegal methyl parathion use has been exposed and many of the results are being tallied. Since I have not seen much farm media coverage of this story, I am reprinting several portions of a recent article that describes the details of this case. Although this is an example of pure stupidity, it puts another black eye on agri-chemicals in the public's mind. If pesticides are to be used safely and their registrations maintained, we must continue to be diligent and "Read and follow the label directions."

Bargain's Continuing Costs: U.S. Pays Millions for Cleanup from Amateur Exterminators

By Joby Warrick

Washington Post Staff Writer

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The Washington Post

MOSS POINT, Miss. To his many customers, exterminator Paul Walls Sr. made but one claim about the cola-colored bug spray he peddled from the back of his truck: "It kills them all," he'd say in a near whisper, "and they don't come back."

He was right about that much. In the small towns along Mississippi's southeastern coast, Walls became celebrated for his "cotton poison," a mysterious, odd-smelling concoction that obliterated roaches and anything else that slithered or crawled. Only later, after Walls was arrested, did his customers discover that it can kill people, too.

Walls's pesticide business was shut down last fall after federal agents -- following complaints from competing exterminators -- discovered he was illegally using methyl parathion, a neurotoxin so lethal that it is sometimes used in

suicides in Europe. But by then, Walls and a business associate, a local preacher named Dock Eatman Jr., had sprayed poison into scores of homes, motel rooms, restaurants and even day-care centers. In the process, officials say, they helped launch what could soon become one of the decade's costliest environmental disasters, with consequences that are only now being fully realized.

Today, more than nine months after Walls and Eatman were arrested, 1,213 Mississippians remain exiled from their homes because of toxins that seeped into floorboards and clung to fibers and plastics. The interiors of nearly 500 buildings are being stripped to the bare studs and rebuilt, all at U.S. taxpayers' expense. Entire trailer homes are being demolished. Furniture, carpet and appliances are being hauled away and replaced. No one has died, but dozens of people have complained of flu-like symptoms while others are worried about future health problems from a pesticide whose long-term effects are not fully known.

The cost is enormous. The \$22 million spent so far is about half the \$40 million the U.S. Environmental Protection Agency expects to spend this year to clean up the damage and compensate the evacuees. The case already has set a new standard for pesticide misuse, while raising questions about the effectiveness of laws that control the distribution of farm chemicals.....

But the problem is not confined to Mississippi. Batches of methyl parathion that originated in the Deep South have apparently been carried north by other amateur exterminators who have created a web of contamination that extends to Louisiana, Arkansas, Tennessee, Ohio, Michigan and Illinois. In Chicago alone, the EPA is expected to spend \$20 million to clean up after Reuben Brown, a retired butcher who sprayed hundreds of homes and apartments with what clients called "the Mississippi stuff.".....

Methyl parathion is marketed under several trade names and used primarily by farmers as a powerful and inexpensive control for boll weevils and other cotton pests. It is relatively safe if used outdoors because it breaks down into harmless compounds after several days of direct sunlight. But indoors, it can remain deadly for months or even years.....

Since November, federal prosecutors have mounted an aggressive campaign to catch and prosecute the small band of black-market exterminators responsible for most of the damage. Six have been arrested and five have been convicted, including Walls, 62, who was sentenced last month to 6 ½ years in prison -- the longest continuous prison term ever assigned for a purely environmental offense.....

.... Walls stumbled onto methyl parathion as the stunningly lethal, no-name bug spray used to treat roaches in the New Orleans boarding house where he once lived. Walls never forgot the distinctive color and smell, and he became excited years later when he came across the compound in Mississippi and learned its name.

Working out of his truck, he marketed the spray door-to-door in the poor and working-class neighborhoods of Moss Point and Pascagoula. With prices that rarely topped \$40 per house, he undercut the established pesticide companies and developed a large and loyal following. People liked his gentle, soft-spoken manner, and they raved about his product.....

His career came to a crashing halt after federal authorities charged him with illegally spraying methyl parathion in 45 homes and businesses. The EPA contends that Walls and Eatman sprayed the toxin in hundreds of buildings over several years.....

Lowrance (EPA's deputy assistant administrator for enforcement) promised a "redoubling" of efforts to prosecute such abuses, and expanded warnings for homeowners to avoid allowing illegal or

suspicious chemicals to be sprayed in their houses. EPA spokesmen noted that the Danish manufacturers of methyl parathion have agreed to give the pesticide a strong, caustic odor to make it less likely that anyone would use it in a home.

Some environmental groups, though, say the pesticide should be banned. In San Francisco, the Pesticide Action Network of North America ranks methyl parathion among its "dirty dozen" of dangerous pesticides.....

THE CULTURAL PRACTICE OF SANDING

Did you realize that sanding was discovered quite by accident? History has recorded that in 1810 on Cape Cod a gentleman by the name of Henry Hall noted that sand blown in from a nearby beach improved the growth of the cranberries on his wild patch of vines. Quoting from *The American Cranberry* by Paul Eck, "Henry owned a piece of low land on which cranberries grew, and adjoining this was a brush knoll, a low, round hill, partly covered with small trees. After these trees were cut the knoll was exposed to winds and erosion, and its sand was blown or washed down upon the wild cranberry vines at its base. Instead of injuring the cranberries that layer of sand improved them, for the vines grew up through the sand and bore larger and better berries. Thus originated the fundamental idea of a layer of sand, which led to the successful cultivation of the cranberry industry."

Sanding is a practice that we use today for multiple reasons. When we sand we assist in insect control. We have found that when one sands after a girdler infestation we cover the injured upright in hopes of encouraging new root development. We also cover up pupated Girdler which may create environment for emergence, thus reducing the population. There are other insects that pupate and fall to the bog floor which will be covered as well.

It appears that sanded beds are a few degrees warmer and the vines seemingly start earlier in the spring than other beds. In 1969, Cross and DeMoranville reported that the sand readily absorbs heat during the day and releases the heat rapidly during the night.

The primary reason to sand is to promote growth. We sand new beds in hopes of increasing our density. Covering those long runners and encouraging new uprights to have their own root system. New beds have little organic matter, thus sanding covers up old leaves and debris encouraging their breakdown so it becomes part of the soil. Older, established beds tend to have a certain percent of upright death, so sanding rekindles the life within the bed, increases density, and allows individual uprights to be self sustaining and not dependent upon a runner.

For all these reasons, we try to rotate our established bed sanding program to be every three to four years. 1/2" to 3/4" is all that is necessary to benefit the crop. New beds should be sanded every year for a few years, or until your density is comfortable. Older established beds can have 400 to 500 uprights per square foot. After all, the more uprights we have, the greater potential we have for production!

Jayne Sojka, Lady Bug IPM

Editors note: Upright density can exceed an upper threshold where uprights begin to compete with each other for light and space. Older research suggested that upright densities of about 200 to 300 per square foot were optimal for Searles. No similar research has been done for Stevens.

DOES IT SOUND FANTASTIC?

Earlier this year I became aware of a company that has a device that produces sound of a certain frequency and when this device is used in concert with an "organic growth promoter" yields are reported to increase. I have heard of this device being marketed previously to Wisconsin apple growers.

Does this sound too good to be true? It does to me. I know of no credible, replicated,

statistically analyzed, controlled research that shows any plant response to sound. I'm not saying flat out that plants won't respond to sound, I'm just saying I have seen no scientific data to support such a claim. I'm sure there are grower testimonials to support this product, but testimonials only go so far. Hard data is what is needed.

I think this is a "buyer beware" situation. Think carefully about this product before you make a purchase. Ask for scientific data that will show both a treatment and a control that are growing under the same conditions except for this treatment. Lacking such data I would not make a purchase. I am aware of an apple grower in western Wisconsin whose neighbors took him to court to shut off the sound-making device, as it was a nuisance.

Teryl Roper, UW-Madison Extension Horticulturist

BERRY SAMPLING

1997 Square Foot Analysis of 536 sites

Cultivar	Berries/ sq ft	Mean berry wt. (g)	1996 mean berry wt.
Stevens	173	0.97	0.74
Ben Lear	245	0.82	0.71
Howes	122	0.57	0.45
McFarlin	169	0.66	0.47
Searles	185	0.76	0.54
Crowley	124	0.57	0.41
Pilgrim	236	0.89	0.73
LeMunyon	145	0.86	0.78

The 1997 Fruit size is just beautiful. When we harvested these sites we found that the fruit did not have any brown seeds inside yet. The blush was superficial and only on the top crop. Deep within the sample were green fruit which are still sizing and taking on weight.

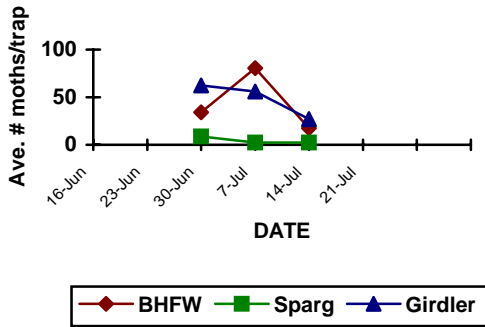
Jayne Sojka, Lady Bug IPM

1997 PHEROMONE TRAP COUNTS

Cranmoor area includes: Adams, Portage and Wood counties
 Warrens area includes: Jackson, Juneau and Monroe counties
 Northeast area includes: Forest, Lincoln, Oneida, Price, and Vilas counties
 Northwest area includes: Barron, Burnett, Douglas, Rusk, Sawyer, and Washburn counties

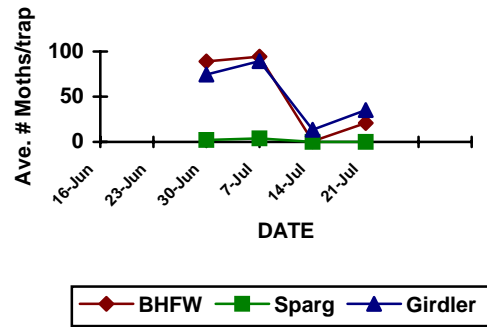
Please note that different regions may have different scales on the left axis. Doing this allows greater accuracy in determining actual values within a region. However, comparisons between regions are more difficult. Please use caution in making comparisons of these averages to trap counts on your marsh.

Northwest Area



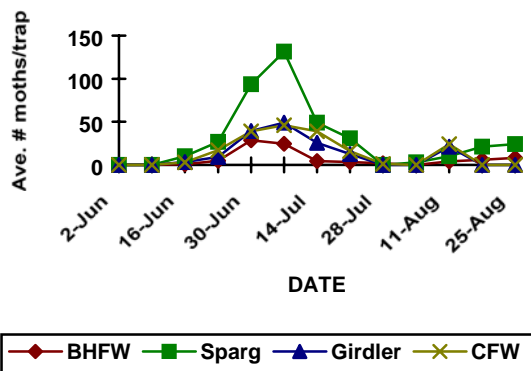
Means from 9 growers

Northeast Area



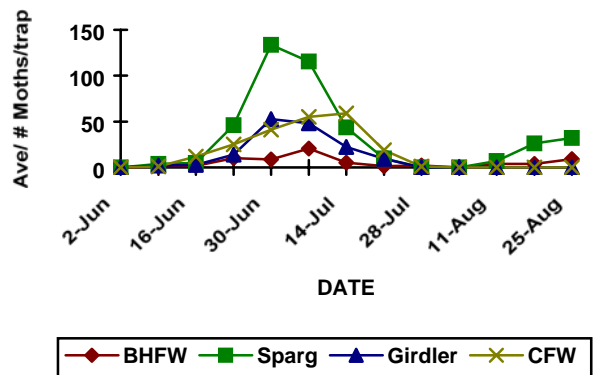
Means from 0 growers

Warrens Area



Means from 27 growers

Cranmoor Area



Means from 34 growers

