

10 Real-Life Lessons In 'What Went Wrong' With Pesticide Use

ANDY ANDREWS
Editor

HARRISBURG (Dauphin Co.) — Former extension agent and now private consultant Eric Vorodi would probably tell you that experience is the best teacher.

And what experience in dealing with pesticides has told him is this: "Know everything there is to know about pests before you begin to willy-nilly spread pesticides around," he said.

Vorodi, Boiling Springs, who served as a Dauphin County horticulture agent, spoke literally about "What Went Wrong" in dealing with pesticides in mid-November this year at the Power Expo 2003.

Vorodi provided 10 examples of what happened to crops — and people — when they handled or applied pesticides the wrong way.

"All 10 are real, true-life stories that happened to me or were related to me by someone I know," said the former Penn State extension agent.

The first story involved a nurseryman who was trying to control an infestation of Fletcher Scale on arborvitae. The coverage area was about three acres, and he selected the insecticide, Dursban, making three applications per year for three years.

Unfortunately, the material was ineffective. What happened? The agents looked at several factors, including pest identification (it was correct), the sprayer and application and label rate (all correct), spray row distances, and other parameters. They all checked OK. The problem? Proper timing — the lifecycle of the crawlers after egg hatch has to be timed early enough, early to mid-July, to get the most control. The

grower readjusted the timing and had complete control with the first application.

Trouble is, the grower spent \$600 before finding this out.

The second story involves grape and tomato plants that were apparently injured by some sort of herbicide. The grower thought a landscape applicator was unaware of spray drift of 2,4-D. The 2,4-D formulation is effective on broadleaf plants, which is correct.

Without jumping to conclusions about the landscape applicator, a local farmer was interviewed, who kept records that indicated a corn planting included weed spray — all documented. The farmer used 2,4-D and Banvil for several days — days favorable for drift.

"Good records go a long way toward proving negligence," noted Vorodi.

The third story involved previously large, vigorous hostas growing under ideal conditions in a landscape. They came up in the spring, however, showing stunting and distortion, and eventually died.

What happened? Evidently a landscape applicator spot-treated weeds with a backpack sprayer, with a large orifice nozzle, low pressure, and no drift, spraying Roundup.

"It is possible, even under ideal conditions, for herbicide drift to occur," said Vorodi. "Drift is occurring much more frequently than you think it is — virtually all the time."

Vorodi said that using Roundup in close proximity to sensitive plants is "not recommended." He told growers to eliminate drift by using a shield, set the spray to low pressure, or use a safer alter-

native, such as a non-selective burn-down herbicide.

The fourth story involved a university plot that was using leaf compost on vegetable beds. Phytotoxicity ended up killing the transplants. But from what? It was found that several herbicides were used for grass weed control and the grass clippings got entangled with the leaf mulch. Even a small amount of the herbicide proved toxic in the compost. Even a tiny bit of material, noted Vorodi, is enough to cause damage to plants.

In the fifth story, a farmer was selecting a preemergent herbicide on tomato fields. He planted 900 plants. But instead of putting the label rate for one-quarter of an acre, he misread the application and put four times the amount on — enough for one acre. The transplants couldn't tolerate the dosage — the farmer had to replant 900 tomatoes. "Measure twice, cut once!" noted Vorodi.

In the sixth story, a small-scale vegetable grower noticed acres of pumpkins with an infestation of squash bugs. The grower found a jug of what he thought was insecticide and applied it. Trouble was, the jug didn't contain an insecticide, but an herbicide, 2,4-D. The pumpkin crop and several landscape plants were killed.

"Never use the container if you are not 100 percent sure of the contents," Vorodi said. He said to make sure and label the product and the date of purchase.

In the seventh story, a farmer picked up a small amount of pesticide and wanted to use an alternative container. He chose a coke soda bottle. Tragically, his 7-year-old daughter took the bottle, drank it, and died. The lesson: NEVER store a pesticide in

any other container other than the one it was manufactured in. Make sure it is clearly labeled, and kept away from children.

"Never place pesticides in unlabeled containers," Vorodi said. "It is dangerous and irresponsible."

Vorodi said that in the year 2000, there were 73,000 pesticide poisonings in the U.S., according to the Environmental Protection Agency. About 23,000 visit the emergency rooms and about 20 people die.

"Never leave children unattended with access to pesticides," he said.

In the eighth story, a grape grower noted the telltale signs of herbicide damage to his crops. It was caused by a 2,4-D ester, used to kill weeds in cooler conditions. A neighbor farmer caused the injury — and luckily they were able to settle without going to court. "The lesson — drift occurs more often than you think," Vorodi said. The Pennsylvania Department of Agriculture labels this "pesticide trespass."

If it is too hot, humid, or windy? Vorodi suggests using the most appropriate pesticide and drift reduction strategies. And if you are at fault, admit it — an investigator will find out what happened anyway.

In the ninth story, a grower found his pickup truck was infused with the repugnant aroma of Diazinon, a popular pesticide. An investigation proved that he went to get a "couple of ounces" of the material from another grower, and he put those ounces in an empty aspirin bottle.

Needless to say, about two ounces of material fell out of the bottle into the seat foam, and is now a "permanent air freshener"

in the truck. The lesson — never use a container other than the original for the pesticide.

In the final story, another one involving risks to human health, a very experienced pesticide applicator had to spend some time in the hospital. Why? He was spraying a combination of Crossbow and 2,4-D, and wore the full bodyguard material, including full TyvekR suit, chemical-resistant gloves, goggles, and respirator. But it was a hot day, so, when spraying for a time, he took off the goggles and respirator, exposing just a little portion of his face.

Trouble is, he was reaching up to spray overhead sometimes. He didn't think anything of it, until he came home to dinner and, as he ate, his eyes began swelling up. He tried to go to bed, but couldn't, because his eyes were swelling up so bad they began to close.

The grower went to the hospital, instead, where he was placed on steroids and released.

What happened? The doctor told him that, after all that time working with pesticides, even a small dose was enough to set up an allergic reaction. That allergic reaction caused the terrific swelling and could have been life threatening.

The lesson: always follow protective label cautions and warnings. Don't take risks with safety equipment.

With Vorodi's 12 years in extension office, he has learned that the "label is the law," and to be cautious when using pesticides.

Power Expo 2003 Seminar and Trade Show is a landscape, nursery, and turf power equipment expo conducted for the first time at the Pennsylvania Farm Show Complex in Harrisburg.

Using Pickup Commercially? You Could Be Subject To Inspection

ANDY ANDREWS
Editor

HARRISBURG (Dauphin Co.) Pickup trucks can be subject to state roadside inspections, especially if those trucks are being used commercially in any form, according to Dan Smyser, chief, Motor Carrier Division, PennDOT.

And that even includes horse trailers or hauling anything for money or prizes.

Smyser, along with a Pennsylvania State Police trooper, provided a truck/trailer inspection demonstration during the Power Expo 2003 conducted at the Farm Show Complex in Harrisburg.

About 100 spectators came to see exactly what the police will be looking for when inspecting trucks with a manufacturer gross vehicle weight rating of 17,600 pounds or more, for in-state, out of state, or interstate, commerce would mean a rating in excess of 10,000 pounds per truck.

According to Smyser, perhaps 99 out of 100 times, if you are in a pickup truck, you probably will simply get waved through. But if you haul for others or carry hazardous materi-

al, you may be inspected.

About 160,000-180,000 trucks use Pennsylvania highways. The state did about 181,000 inspections last year, according to the motor carrier chief.

To pass inspection, follow these tips:

- Make sure you have a driver's license with the correct classification.
- Have a medical examiner's certificate ready.
- Carry documentation about what you are hauling, particularly if you are getting paid to haul it.
- If you use the truck for personal business, "prove that to us — be honest," said Brian Livingston, state trooper.

"It's all communications, folks," said Smyser of PennDOT. "Tell us what's going on. If it makes sense, we'll believe you. If it doesn't make sense, we're going to ask you some questions."

What a state trooper will look for at the "rest site" weigh station will include:

- PUC registration.
- Tires and brake check.
- Exhaust check.
- Lights check.
- Material secured.
- Fire extinguisher accessible, charged, and secured with proper strap.
- Approved gas storage containers properly secured.

The best way to know what to expect is to get a copy of the federal regulations. They can be ordered from the Federal Motor Carrier Safety Administration on the Website, www.fmcsa.dot.gov

and can be downloaded to printer paper.

If the vehicle doesn't pass inspection, "you can't move the vehicle until it is properly repaired," said Livingston.

Bill Wells, Watercrest Farms Nursery, West Grove, and chairman of the Pennsylvania Landscape and Nursery Association, sponsors of Power Expo 2003, noted this was the first Power Expo at Farm Show.

"This show is just machinery," said Wells. Emphasis is on power equipment used by landscape companies and nurseries.

The late fall

show allows the equipment manufacturers to show their product. About 2,000 were preregistered for Power Expo.

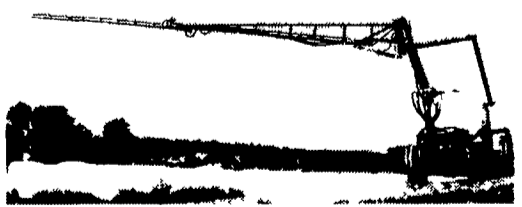
The next Penn Allied Nursery Trade Show (PANTS) is scheduled July 27-29, 2004 at the Fort Washington Expo Center in Fort Washington.

Power Expo 2004 will be conducted Nov. 10-11 at the Farm Show Complex in Harrisburg.



Eric Blauch, Palmyra, looks over a front-loader equipment simulator at the Power Expo 2003 at the Harrisburg Farm Show Complex.

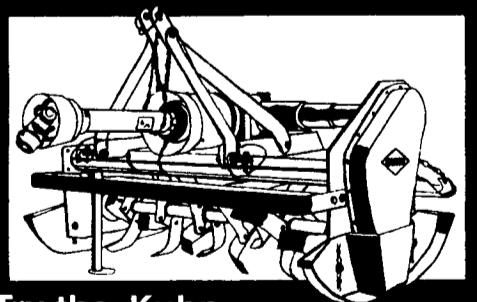
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