

Farm Talk

Jerry Webb

While environmentalists press for an end to agricultural chemicals and naturalists talk about food production without agricultural chemicals, researchers continue in their effort to find a better way to produce our food supply using agricultural chemicals in a safe and sensible way.

If you doubt the continued need for these chemicals, particularly pesticides, consider this: Food producers worldwide battle against 10,000 harmful insects, 1500 damaging diseases, 1800 noxious weeds, and 1000 tiny nematode species. Obviously, it will take a lot more than a sharp-eyed bug picker to deal with crop damage potential of that magnitude.

Beyond the usual problems of pesticide handling and application is the burdensome task of disposal. What does a farmer or commercial applicator do with leftover pesticides and with the residues from pesticide containers?

There was a time when they simply dug holes and buried them, or stored them in large containers and then buried the large containers. But environmentalists are rapidly putting an end to that kind of behavior, and rightly so. They're saying to pesticide users that they must clean up their act, and that includes safe disposal.

So what is a safe way to get rid of pesticide residues?

Researchers at the Iowa Agricultural Experiment Station are working with the Environmental Protection Agency, testing a system that holds great promise. It's simple, can be accomplished on the farm, and seems to be quite safe. A research team of agronomists, engineers, botanists, entomologists, horticulturists and bacteriologists, using funds from the Environmental Protection Agency, has converged on a concrete pit that is yielding a lot of information about pesticide disposal.

The project involves a 12 x 30-foot pit that slopes from 3 to 4-feet deep. It's lined with a layer of gravel, followed by a layer of soil and another layer of gravel. A tile line underneath the pit allows researchers to sample ground water, and a movable roof covers the pit during rain. This setup allows the researchers to see what does happen to pesticides that are disposed of in such a manner.

The researchers were looking for a system that would be leak-proof and overflow proof, that would provide an environment in which chemicals could degrade or decompose into harmless substances. And they wanted something that would allow water evaporation to make room for more waste.

During the research effort, more than 40 pesticides have been disposed of in the pit, usually in the form of rinse

water from applicator equipment.

Here's the interesting part. Researchers found no chemical buildup in surrounding ground water and no contamination in a well, located only 240 feet from the pit.

They discovered that the chemicals did break down through chemical and biological processes, and that the atmosphere around the pit contained less than one part per billion of chemical contamination.

According to one researcher, that amount of contamination is equal to a speck of dandruff on a hair stretched from the earth to the moon.

At another site, the Iowa researchers looked at a number of small pits made of plastic garbage cans. These also produced encouraging results.

The researchers say that while the soil has an amazing ability to absorb and break down pesticides, man has the ability to produce chemicals faster than Mother Nature can dispose of them. That means some form of containment, perhaps the concrete pit or maybe even the small plastic garbage cans, are the answer to this "pesty" problem.

Obviously, more research needs to be done before the Iowa team is ready to say that these pit disposal units are the answer to all pesticide problems, and they want more time to look into other aspects of pesticide disposal.

In the meantime, they are developing a final report of the first three years of this work and will make

Area schools earn top honors with windows

HARRISBURG — The fifty-sixth annual agricultural and homemaking school exhibits were held in conjunction with the Pennsylvania State Farm Show this week.

The exhibits are conducted as a contest between chapters of the Future Farmers of America and the Future Homemakers of America.

In the FFA competition, Manheim Central High School, Lancaster County, took second place next to the Curwensville Area High School of Clearfield County.

The Manheim FFA Chapter's window exhibit was titled "Thieves in the Night." The exhibit provided examples of thieves of the night and measures that can be taken to control the thieves.

For their second place finish, the Chapter earned \$65.

In the home economics competition, the Warwick High School FFA Chapter of Lutz, Lancaster County took third place honors.

Their display, "Know Your Cookware" informed the viewer of four different types of cookware, mentioning both the advantages and disadvantages of each.

The FHA Chapter will receive \$55 for their efforts.

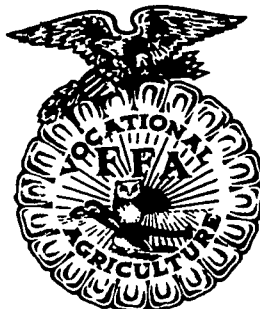
A complete list of the School Window Exhibits follows.

AGRICULTURE
1 Curwensville Area High School 2 Manheim Central High School 3 Mifflinburg Area High School 4 Central

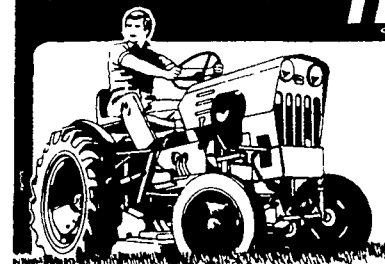
Fulton High School 5 Tri Valley High School 6 James Buchanan High School 7 Penns Valley High School 8 Kutztown Area High School 9 Berks Area High School

HOME ECONOMICS

1 Montgomery Area High School 2 Southern Columbia Area High School 3 Warwick High School 4 Red Lion Senior High School 5 East Juniata High School 6 Harrisburg High School 7 Halifax Area High School



POWER KING TRACTOR



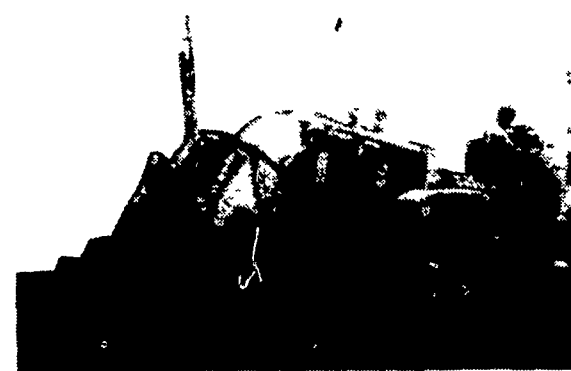
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