

When 'Chemophobia' Strikes

Industry must continue to develop programs that provide economically sound pest management for turf while satisfying public concerns

*by R. L. Brandenburg, Ph.D., North Carolina State University
Reprinted with permission from Landscape Management, March 1990*

The past year has seen a dramatic shift in public concern over pesticides. All evidence suggests that these concerns, whether real or imaginary, will proliferate and create a greater demand for changes within the green industry.

So how is the industry to face this new challenge?

It is up to landscape professionals to help discourage this pesticide phobia. The green industry needs to develop programs that provide economically sound pest management for turf programs to satisfy the public.

Why the recent concern?

It appears the public has developed a recent fear toward scientific developments directed at benefitting mankind. Perhaps some of this fear is the result of the media focusing on dramatic stories that emphasize the negatives of recent advances in pesticide use. Although informing the public of potential health risks is certainly the responsibility of the news media (and many do so quite accurately), some prefer to capture the public's attention with a flare for the dramatic rather than for the facts.

The concern in the turf industry has coincided with common fears of pesticide residues in food. The focus has been that we are consuming large amounts of pesticide residues. Frank E. Young, when he was the commissioner of the U.S. Food and Drug Administration,

stated, "That's a myth, and another myth is that any residue, no matter how little or how legal, is harmful."

The public is confused. Not confused over the fears, but rather confused over the emotional stories and conflicting reports on the facts.

As recently as 20 years ago, science could detect residues only in parts per million. Levels of any substance up to 999 parts per billion were undetectable and showed up as zero residue. Now some substances can be found at one part in a quadrillion (1:1,000,000,000,000,000).

These measurements simply indicate an advance in science, not a new health risk.

On top of all this some consumer groups consider turf a non-essential use of pesticides. However, turf is a valuable commodity that introduces billions of dollars into the economy. Turf also provides oxygen, reduces pollution, stops erosion, reduces dust and contributes many other favorable attributes to the environment and our everyday lives.

As professionals, our livelihood depends on educating the public on the facts of your operations and the pesticides you use. You must also know the facts concerning pesticide risks and be prepared to discuss them in an intelligent manner. To simply disagree and fight any non-pesticide group simply creates an "us-and-them"

scenario in which no one benefits. At the same time, practicing good stewardship of both the environment and of pesticide use will help ease public fears. Through a better understanding, I believe we can prevent a "snowballing" effect of the "chemophobia"-based fears we are experiencing today.

Fact vs. fiction

One of our most difficult tasks is separating fact from fiction. This is especially difficult since we sometimes even see scientists disagreeing on the same topics. However, there are some important facts that all turf pesticide users should know. With this knowledge at hand, intelligent answers can be provided to clientele with legitimate—but perhaps, unfounded—fears. The two major fears are:

1. Pesticides are applied in a haphazard manner. *They are not;* they are applied either by personnel certified and licensed by the state or under the direct supervision of one who is licensed. Companies spend eight to 10 years and \$30 to \$50 million to get a pesticide registered. That includes all the research, not only on field trials, but also on toxicological and environmental studies.

Such a substantial investment pushes companies to insure proper limitations are placed on the label of each pesticide. Misuse

Continued on page 6

could lead to loss of the product before the company ever had a chance to recoup its research costs. Therefore, the label restrictions limit any environmental or health hazard.

2. Pesticides are a threat to human health. Not necessarily. The misinformed perception of natural vs. synthetic has fueled the fire. People perceive "natural" foods as being healthier, yet they contain a surprising assortment of substances that consumers aren't aware exist in food.

It has been estimated that as much as 90 percent of our cancers may be related to the environment. Two articles in *Science* (April 17, 1987) present a startling presentation that the air we breathe in our home and other "natural" and daily aspects of life presents a much greater cancer risk than pesticide residues.

The public should not forget

the millions of lives pesticides have saved by eliminating diseases carried by insects. Such factors certainly play a significant role. People in developed countries live longer than those in underdeveloped ones. The public is willing to accept natural risks, while rejecting "synthetic" risks that pose only a minute threat.

Americans are living longer and healthier lives. Except for skin cancer, attributed to overexposure to sunlight, and lung cancer, linked to smoking, cancer rates are staying the same or have decreased, according to the National Cancer Institute.

The facts can work for you

The first thing you should do as a professional is to use the facts to your advantage. When you discuss pesticides with your clientele, present the information in a professional manner. Keep

emotion out of the discussion. You may even want to develop a pamphlet containing factual information to distribute. Consult your local extension office or university for additional information on pesticides in turf.

The public has a right to know the facts. Developing a trust in you as their turf manager is a big step in the right direction. Dressing and acting in a professional manner are also critical to develop a good reputation.

We need to practice good stewardship of the environment and make sure we use pesticides wisely. Calibrate properly, apply as directed and don't cut corners in safety. When accidents happen, it reflects on the whole industry.

Turf professionals can't afford to fight the posting laws being passed in many states. Although this is a sensitive subject, fighting these laws gives the appearance

SUMMIT HALL

The first Turf Farm of America Inc.

The Pioneer Producers of Premium Lawn Sod and Superior Turf Grasses

**MEYER Z-52 ZOYSIA:
MEDALLION™ TALL FESCUE:
SUPREME KENTUCKY
BLUEGRASS:**

PICK-UP or DELIVERY
member (301) 948-2900


American Sod Producers Association


MEMBER
AMERICAN
ASSOCIATION
OF NURSERYMEN

21300 River Road
Poolesville, Maryland 20837

MON-FRI.
8:00-5:00

SAT.
8:00-12:00

FAIRWAY FAVORITE

COUNTRY CLUB

18-3-12

HOMOGENEOUS FERTILIZER

- * special small homogeneous granulation
- * thorough nutrient & particle distribution
- * proper fertilizer coverage - even at lower rates
- * reduced clippings

The Better Choice for Better Turf.

Lebanon
TURF PRODUCTS
800-233-0628

that there is something to hide.

Although these laws require extra work, they will help diminish some fears since people will know what's applied. Upon notification, they can avoid an area if they want to.

Look to alternatives

Turf managers may want to begin looking more at alternatives, such as cultural and biological controls.

Milky spore for Japanese beetle grubs is again increasing in popularity. Turf managers should be aware of biological controls as they are developed.

Universities are developing more information on Integrated Pest Management (IPM) for turf. New threshold and scouting techniques are continually being refined.

The future will see a natural progression away from preventive treatments to "on demand"

applications.

The public's current concerns certainly make this an excellent time for introducing IPM. The public is likely to readily support this; its success in several states offers the proof.

Make sure your own house is in order. Encourage all your workers to have proper training

Companies spend eight to 10 years and \$30 to \$50 million to get a pesticide registered.

and attend conferences to enhance their education. Keep your operation squeaky clean and be involved in the development of reasonable pesticide policy.

Finally, as an act of concern for environmental stewardship and health concerns, you might consider joining one of the many environmental groups (Sierra

Club, National Wildlife Federation, Nature Conservancy) to express your interest in their concerns. Not only will your membership support these organizations, it may also function as good publicity by showing that groups should work together for the intelligent resolution of differences in goals.

Decisions based on fact

This article is not meant to downplay the risks involved with the use of pesticides. They must still be properly used and applied. It does, however, present a scientifically based report on their use.

This information should be useful in minimizing the current fear many have of the green industry. The final decision on turf management lies with the membership; but let the membership decide based on facts, not on emotion.

Large Trees Sales/Transplant

- All Varieties
- Specimen Material
Our Specialty
- Estate/Historic
- Rare & Unusual

Call for availability list






Ace Tree Movers, Inc.

Custom Tree Moving

Gaithersburg, MD

(301) 258-0008


1-800-258-4ACE Fax: (301) 948-7143



EA'S GREEN MEADOWS, Inc.

5050 Beech Place
Temple Hills, MD 20748
301-899-3535 • 800-552-TURF (8873)
FAX 301-899-2172

ROOTS GROWTH ENHANCER



- Quick establishment and root regrowth in overseeding and sod installation
- Effective prevention of stress
- Faster recovery from disease and insect damage
- Better uptake of fertilizer and chemicals

*Distributors of Quality Products
to the Golf Course Industry*