

Sod producers talk business

NEWPORT, R.I. — Turfgrass sod will be featured at the American Sod Producers Association's annual Summer Convention and Field Days here July 27-29. This behind-the-scenes showcase highlights equipment, products and services considered important elements of producing sod for home and commercial use. The convention opens Wednesday, July 27, with committee and annual business meetings and an educational program, all at Newport Islander Doubletree Hotel.

Thursday will be devoted to exhibitor product and equipment displays, and demonstrations and viewing of ASPA seed test plots. Friday is tour day. Attendees will travel to the University of Rhode Island Agriculture Experiment Station in Kingston, Tuckahoe Turf Farms and Washington County Turf Farms.

For more information, contact Thomas Ford, American Sod Producers Association in Rolling Meadows, Ill.

USGA REPORTS

Scientists take EPA's pesticide fate model to task

Continued from page 1

of herbicides through soils used for agricultural crops.

Using small greenhouse lysimeters, the GLEAMS model prediction was compared to actual values for a 22-inch soil profile very similar to United States Golf Association (USGA) putting green specifications.

Lysimeters are small bucket-like devices with a collection tube at the bottom to determine what

pesticides leach through the soil profile. The USGA-recommended gravel blanket and intermediate sand layer were included in the profiles.

Two different putting-green, root-zone mixes consisting of 85:15 and 80:20 by-volume ratios of sand and sphagnum peat were placed in small greenhouse lysimeters. Tifdwarf Bermuda grass was established onto the lysimeters and mowed at

putting-green height.

The 2,4-D, a broadleaf herbicide, was applied in two applications 15 days apart. Once the herbicide was applied, the lysimeters received a simulated rainfall of one inch on Fridays during the 120-day experiment. One-quarter inch of water was applied on the rest of the days of the week to simulate irrigation.

Daily temperature changes were carefully monitored so this information, along with the rest of test parameters, could be entered in the GLEAMS model.

The results demonstrated the GLEAMS model over-predicted the amount of 2,4-D that would leach through each putting-green root-zone mix. Only minute quantities of 2,4-D were detected in the water that leached from the lysimeters.

The extraction and analytical methods were developed to detect levels of 2,4-D at 5 micrograms per liter (5 parts per billion or 5 ppb) or higher.

Peak 2,4-D amounts of 2 micrograms per liter (2 ppb) or less were found in the water samples removed from the bottom of the lysimeters.

Only a trace of 2,4-D percolates through the rooting media, and the concentration is several orders of magnitude less than the MCL (maximum contamination level) standard of 70 micrograms per liter established by the Office of Drinking Water, U.S. Environmental Protection Agency, explained Smith.

"Even though the GLEAMS model greatly overestimates the observed herbicide load," he added, "the maximum predicted concentration of 40 micrograms per liter is less than the MCL standard established for 2,4-D."

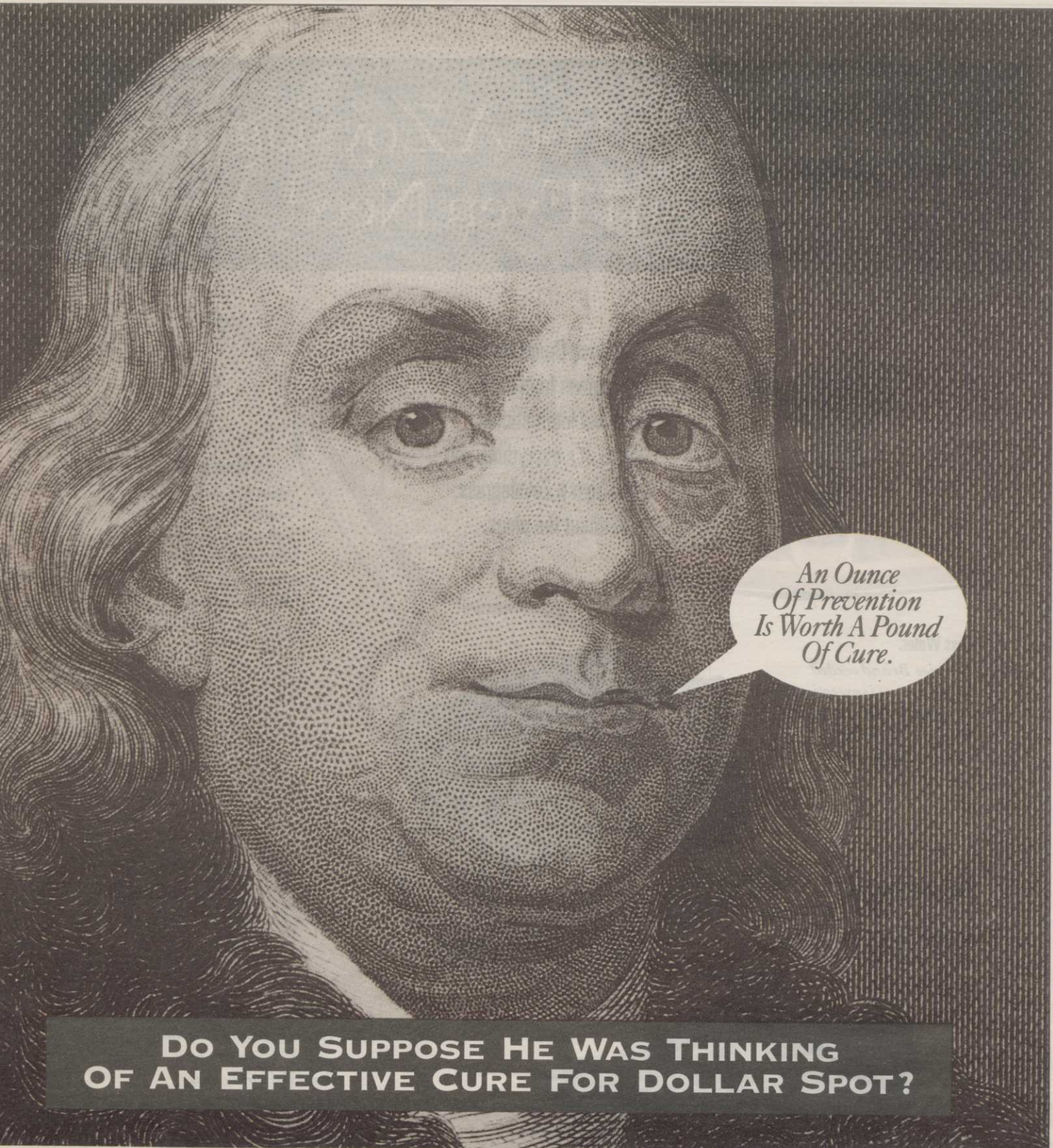
Differences between the measured and predicted percolation of 2,4-D may be due to a lack of understanding of herbicide fate on the dense surface of turfgrass leaves and the role of thatch, Smith said.

The inability of the current GLEAMS model to adequately predict surface evapotranspiration (ET) and water movement through the turfgrass/soil system are additional cause for concern.

"Our data indicate that the dynamics of the sod and rhizosphere, immediately below the soil surface, have not been thoroughly defined," concluded Smith.

"There is an urgent need to take the results from USGA-sponsored pesticide fate research projects, as well as other pertinent research, and overhaul the mathematical models for use on golf courses."

Mike Kenna, PhD, is director of Green Section Research for the United States Golf Association. He works from the USGA office in Stillwater, Okla.



In turf, as in life, once a disease has set in it becomes harder and more costly to cure.

So it's no wonder that in the constant war against dollar spot, turf specialists everywhere are turning to Banner® as a weapon of unparalleled efficiency.

For a start, it's the best product available. Not only is it superior in prevention than any



fungicide, it also provides longer residual than any other systemic. While giving added protection against eleven other major diseases.

Which means turf stays healthier longer, and you get consistently beautiful results.

And should anyone want to know how you did it, just tell them you took the advice of an expert.