

"The Public Must Be Told" Weedmen Decide At 18th Northeastern Weed Control Conference

In his opening address to more than 750 delegates at the 18th annual Northeastern Weed Control Conference, outgoing president A. J. Tafuro insisted that the entire scope of public relations must be improved and increased in the coming months if the public is to have the real truth about chemical weed control.

Tafuro, who is with American Cynamid in Princeton, N.J., made his opinions about the "PR" function quite plain: "I will suggest to the new executive committee that we put more emphasis on public relations in 1964," the industry authority indicated.

Weed control scientists like the 750-plus representatives of universities, manufacturing firms, and commercial applicators who gathered at the Hotel Astor in New York City Jan. 8-10, should contribute articles to popular and semi-technical magazines, appear on club programs, and otherwise take the true story of weed control with chemicals to the populace at large, Tafuro urged.

Tafuro's remarks preceded a trio of "keynote" addresses which touched on three salient areas of interest to the weed controllers: one renowned highway expert told how and why his state uses chemicals to control weeds; a researcher delivered a highly technical and intriguing report on the use and value of surfactants, and the third offered a compendium of 1963 tests results with promising new compounds.

Roadsides were maintained for many years without herbicides. Why then is it necessary to use

herbicides in today's roadside maintenance program? asked Andrew M. Ditton in the conference's initial session.

Ditton is Senior Landscape Architect, New York State Department of Public Works, Albany.

Reason for the ever-increasing need for more efficient control of weeds along rights-of-way is the tremendous highway building boom which had its inception just after World War II.

Of course, the nature of modern highways, including turnpikes and the vast interstate system, dictates that more weed and turf work is needed, simply because of the physical nature of roadways today. Miles of median strips which thread their way across the land mean millions of dollars must be spent to keep them green, neat, and noninterfering with the essential character of the highway system.

The staggering costs of highway mowing is such that supervisors such as Ditton must resort more and more to chemical means for maintaining trimmed grass areas and landscaped embankments.

What will the industry need in the years ahead? Ditton mused. There are three developments which the landscape expert would like to see realized for tomorrow's rights-of-way programs:

1. Herbicides for broadleaf weed control which are non-volatile and in a form (dry or liquid) that is not subject to drift;

Keynoters at the 18th Northeastern Weed Control Conference, the largest in history, included landscape architect A. M. Ditton (below left); Maryland researcher Dr. J. D. Riggelman (below center); and USDA surfactant expert Dr. G. C. McWhorter (below right).

2. Application equipment that will efficiently apply a variety of materials such as granular products as well as liquids; and

3. A growth retardant with a wider range of effectiveness, both as regards plant species and stage of growth.

"Increased emphasis must be placed on the appearance of highway roadsides," Ditton concluded. "We must recognize that the natural beauty of our roadsides is something to be cherished and protected."

Surfactants a Major Aid

"Evolution of plant species has resulted in elaborate variation of the cuticle which in part permits plants to grow in the frigid Arctic and in the blistering desert," according to C. G. McWhorter of the U. S. Department of Agriculture in Stoneville, Miss.

McWhorter co-authored (with Stoneville USDA-man E. E. Schwizer) a paper on the use of surfactants which revealed, in general, that the toxicity of many herbicides is dramatically increased when a surfactant is added to a formulation.

Much of the research at Stoneville has concerned itself with 3,4-dichloropropionanilide (DPA) 2-2-dichloropropionic acid (dalapon), and 3-(3, 4-dichlorophenyl)-1,1-dimethylurea (diuron), the plant physiologist said. In tests with diuron, the addition of surfactants increased herbicidal toxicity and activity with noteworthy results.

"Diuron-surfactant spray mixtures are obviously very phytotoxic when applied postemergence, and these treatments should be economical for weed



control in many situations," the scientist surmised.

An illustrated address which summarized the results of new herbicide tests was presented by Dr. James D. Riggelman, a research assistant with the University of Maryland Vegetable Research Center in Salisbury. There are some exciting new offerings just over the horizon. They include:

- Dicamba, or Banvel-D, a herbicide from Velsicol Chemical Corp. is said to be excellent for brush control. Dicamba is 2-methoxy-3, 6-dichlorobenzoic acid.

- SD7961 is an experimental compound from Shell Chemical. Tests indicate the product is useful for weed control in Bermuda turf. Chemically SD 7961 is 2,6-dichlorothiobenzamide.

- From Thompson-Hayward comes Casoron, 2,6-dichlorobenzonitrile (dichlobenil), a new chemical found to be useful on ornamentals.

- Dacthal, introduced some time ago by Diamond Alkali, is finding more and more uses, and will now be available in a new formulation which will release the herbicide at a specified rate. Dacthal, dimethyl-2,3,5,6-tetrachloroterephthalate (DCPA) is in wide use as a pre-emergence crabgrass killer.

- One of the most exciting of the new chemicals is Tordon, from The Dow Chemical Co. of Midland, Mich. Tordon has been proved particularly effective for brush control, and is recommended to control cactus in turf and sassafras in cemeteries. Chemically 4-amino-3,5,6-trichloropicolinic acid. Tordon represents a new family of herbicidal compounds.

- Another product of Diamond Alkali is a brush killer made from a new salt of 2,4-D. Known as oleoyl 1, 3-propylene diamine salt, the chemical is said to possess low volatility and high penetrability with the result that many resistant species of brush are more easily killed.

- Azar is a new crabgrass killer from Hercules Powder Company, a chemical from the methylcarbamate group. Azar will soon be available on the open market.



Outgoing prexy A. J. Tafuro was justifiably proud of the current session as he congratulated new NWCC leader, Dr. Robert A. Peters.

An interesting supplement to Riggelman's presentation was the "New Herbicides from Industry" session, now a standard part of the NWCC program. In this portion representatives from various companies are permitted to stand up and tell about new chemicals which the various firms have available.

Of interest to industrial weed controllers is a new water soluble formulation of bromacil, introduced by E. I. duPont de Nemours & Co. in 1961 as "Hyvar." Once this new product is completely dissolved in the spray tank through mechanical or hydraulic agitation, no further agitation of the spray liquid is needed duPont claims.

Representatives of Hooker Chemical Corp. told of Tritac 10G, a formulation of the herbicide Tritac which was introduced last year and which is produced jointly by Hooker and U.S. Borax. The compound is said to control a wide range of annual and perennial broadleaf weeds.

Stauffer Chemical Co. now has Betasan, a selective herbicide for use on turf. Betasan can be applied as a pre-plant, pre-emergence, or postemergence treatment on Dichondra lawns.

Allied Chemical also has a new product, the experimental herbicide coded as GC-7887, which is in fact hexafluoroacetone trihydrate. It is an effective, nonselective, systemic weed and brush killer, the Allied representative pointed out.

The record turnout of weed control personnel was justified by a program that was startling in its diversity and sheer bulk.

Nearly every type of weed control problem received meticulous attention, including such divergent fields as public health weed control, aquatics, weed control in turf, and of course, as always, a most extensive analysis of rights-of-way weed and brush control problems. The scope of the program is too broad to be summarized on these pages, but a complete Proceedings has been published and is available, for \$3.50, from the group secretary-treasurer, Dr. John A. Meade, Dept. of Agronomy, University of Maryland, College Park.

There were several outstanding presentations of particular significance for the urban/industrial vegetation management personnel who read *Weeds and Turf*.

Use Back-Pack Mistblowers

One such paper was an analysis of the use and effectiveness of the back-pack mist blower for chemical brush control on rights-of-way. The study was conducted by L. C. Kenerson and A. W. Coombs of the Dept. of Forestry, University of Massachusetts, Amherst.

In short, the researchers say the high mobility of the back-pack mistblower, the small amount of spray required to cover large areas, combined with the opportunity to vary the volume applied to suit the kind of brush, make this type of operation very versatile for use on power lines. Use of these devices should be increased in the future, the foresters urged.

Helicopter Use Increasing

Another talk which held delegates' attention was a paper on the use of helicopters for applying herbicides, presented by Charles P. Logg, Jr., vice president of New Jersey Helicopter Airways, Inc.

"The day is coming when aerial applications by the helicopter will overtake its obsolete cousin, the airplane," Logg predicted.

Conference members took time out from their busy educational program to conduct business meetings, attend a banquet, and elect a new president. He is Dr. R. A. Peters of the University of Connecticut. Dr. Meade remains as secretary-treasurer.