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WEEDS TREES and TURF

FORMERLY WEEDS AND TURF

August 1965
Volume 4, No. 8

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On a recent visit to a nature conservancy, we saw a newspaper story about Bidrin for Dutch elm disease posted in the hospitality lodge. The managers wished to tell sanctuary visitors that there was hope for control of this destructive disease of our native American elm. They seemed to approve this technique. (See page 10.)

We ponder a moment to reflect why outspoken nature groups accept one form of insecticidal control and reject others vehemently. Readers are aware of the charges, which began to fly during the historic summer of 1962 when the *New Yorker* serialized Rachel Carson's *Silent Spring*.

Bidrin, despite its *highly toxic* nature, has *little hazard* when used with proper precautions. With your own safety, and the safety of innocent bystanders, both human and animal, firmly in mind, you can apply the protective Bidrin to elm trees.

We are impressed, as the public must certainly be, by the time and trouble taken by the Shell Chemical Company to insure safe application of this new chemical by qualified people.

Perhaps this explains the seeming inconsistency of the "antipestecider." The public accepts treatments where the manufacturer and the industry are obviously taking positive steps to make certain treatments will be safe. But, you say, all chemicals we use must be tested and registered with the government before use. True, but is this enough for the public? Take a lesson from Shell and its applicators; you will see that emphasis on the safety of application of *any chemical* to any plant, be it turf, ornamentals, or weeds in water or on industrial plant sites, will help win public support. In truth, it is this same public which buys protection for prized plantings, or pays for removal of unwanted vegetation. They just want to be certain it's done safely.

The lesson is clear. Attend clinics and short courses to learn of the safe use of chemicals—tell the public that you attend such industry functions. Be knowledgeable of your chemicals—tell the public that you are knowledgeable. Conduct your operations with obvious safety emphasis—inform the public that you do this. Be considerate of other forms of nature which may be affected by your treatments—tell the public that you are considerate. Know the limitations of treatments you offer—tell the public so.

Above all, let your actions bear out what you tell the public.

WEEDS TREES AND TURF is the national monthly magazine of urban/industrial vegetation maintenance, including turf management, weed and brush control, and tree care. Readers include "contract applicators," arborists, nurserymen, and supervisory personnel with highway departments, railways, utilities, golf courses, and similar areas where vegetation must be enhanced or controlled. While the editors welcome contributions by qualified freelance writers, unsolicited manuscripts, unaccompanied by stamped, self-addressed envelopes, cannot be returned.



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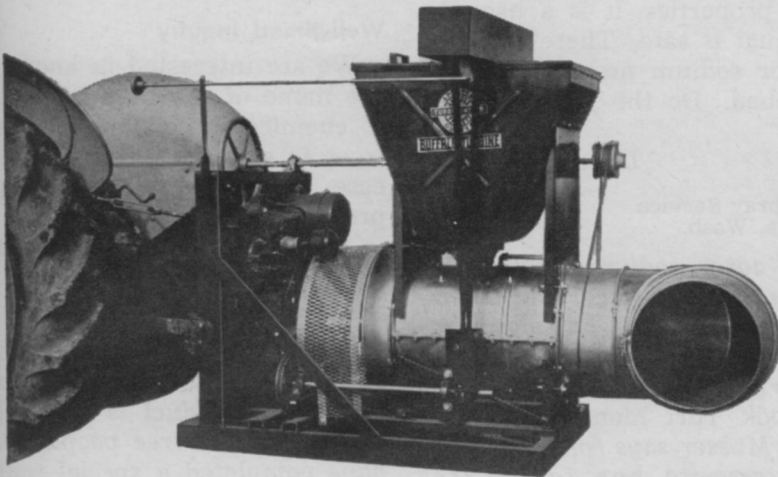
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— WTT Mailbox —

"Tree" Is Company, Too

I would like to add my word of praise for the new scope of your publication. It is very helpful to have the three subjects covered in one magazine.

Edward A. Connell

Public Relations Chairman
International Shade Tree Conference

* * *

A bit of praise for you is well in order. I receive your magazine regularly, read it from cover to cover, and enjoy it very much. I think your adding of the word "Trees" to the title was a nice touch.

Noel B. Wysong

Secretary-Treasurer
Midwestern Chapter
International Shade Tree Conference

Dislikes Sodium Arsenite

In your February 1965 issue on page 8 of Tom Mascaro's Guide to Turfgrass Renovation, it says "Sodium arsenite or an equivalent material is applied about one week prior to aerification . . . for a complete renovation program." I must disagree. Sodium arsenite should not be mentioned. Due to its toxic properties, it is a hazard. Paraquat is safe. There's no label for sodium arsenite use as described. Do the job safe and sane.

Donald J. Miller

A-1 Spray Service
Tacoma, Wash.

We agree sodium arsenite is highly toxic and hazardous when handled carelessly, but we must support Mr. Mascaro's statement on its use for renovation. The textbook Turf Management by H. B. Musser says (p. 202): "Sodium arsenite has found its greatest usefulness killing undesirable vegetation preparatory to a complete renovation program. . . . It kills plant tissue with which it comes in contact . . . not effective for eradicating grasses with rhizomes. Species like Kentucky bluegrass, Bermuda, and quackgrass will survive extremely heavy dosages."

Dr. Musser's discussion of golf

course fairway renovation on p. 181 of the same text differs only from author Mascaro's in the addition of detail, and the fact that Dr. Musser prescribes a minimum rate of 40 to 50 lbs. per acre for Poa annua eradication, while Mr. Mascaro states that 35 lbs. per acre is the usual rate.

We must disagree that sodium arsenite has no label for this use. We quote from a specimen label of one formulation of sodium arsenite by the Chipman Chemical Co.: ". . . used for renovation and selective weed control of certain weeds in turf."

In detail the label reads: "When sodium arsenite is recommended for 'scorched earth' treatment, use 5 to 13 gallons of Atlas 'A' in 50 to 100 gallons of water per acre (Atlas 'A' contains 4 lbs. of arsenic trioxide per gallon). Apply in fall at least 14 days before preparing seed bed for reseeding."

To the best of our knowledge, Paraquat is not labelled for renovation of turf. We do know it is labelled for control of winter broadleaf weeds on southern dormant turf only.—Ed.

Well-timed Inquiry

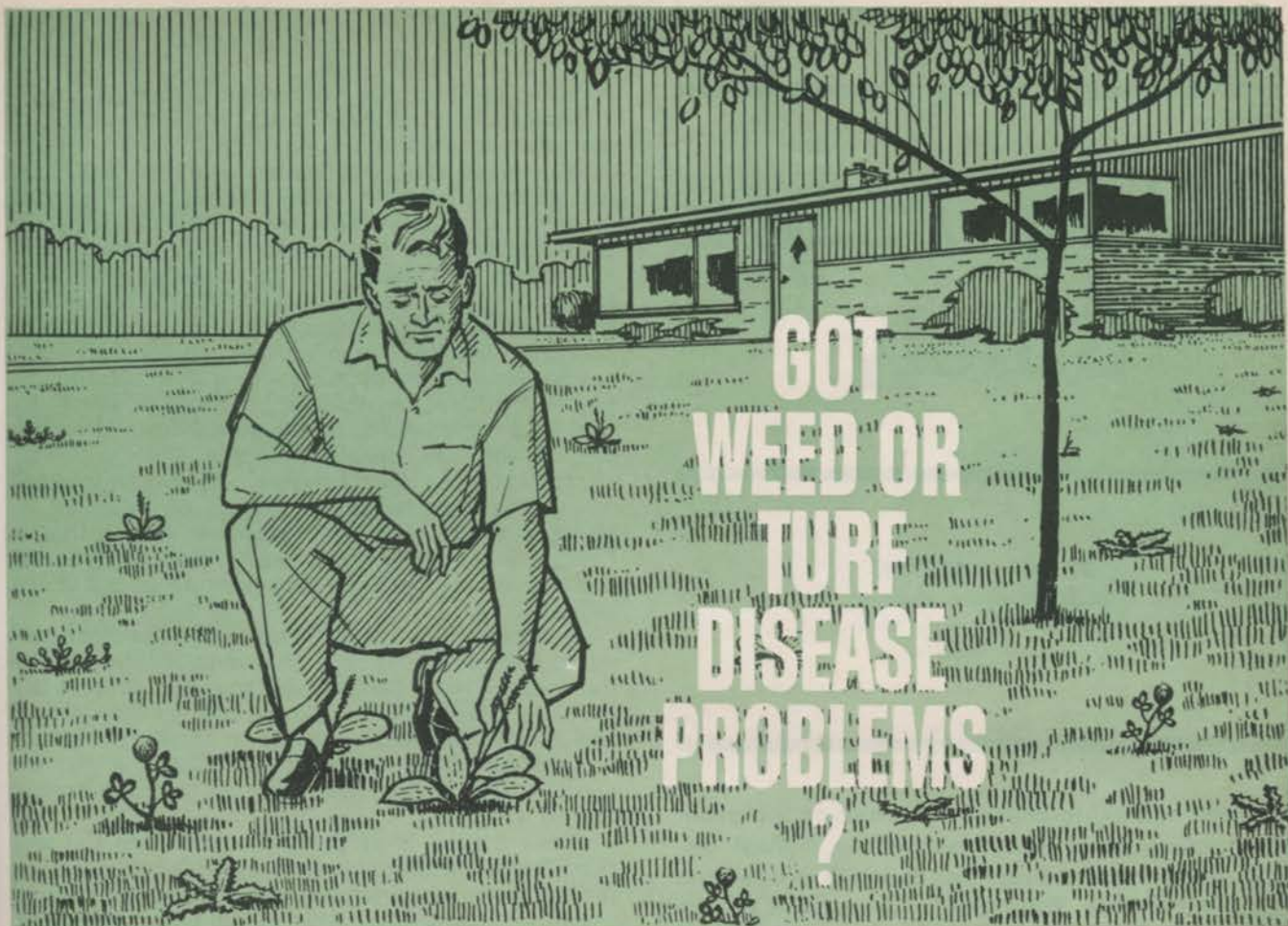
We are interested in knowing the name of the firm that sells a chemical injection for elm trees to prevent Dutch elm disease. Where can we obtain this product?

Don Kamban

Schoenbrunn Evergreen Gardens
New Philadelphia, Ohio

See page 10 for a report on Bidrin, the chemical you mention. This product is sold only to professional tree people who have completed a special training course. Agricultural Chemical Div., Shell Chemical Co., 110 W. 51st St., New York 20, N. Y. can furnish details.—Ed.

Weeds Trees and Turf welcomes expressions of opinions from its readers. Send ideas and comments briefly as possible to James A. Nelson, Editor, Weeds Trees and Turf, 1900 Euclid Ave., Cleveland, Ohio 44115.



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Using Bidrin Safely

By **JAN MARFYAK**

Accident Prevention Consultant
Wisconsin State Board of Health
Madison, Wisconsin

A leave-nothing-to-chance instruction program for applicators of Bidrin insures the highest degree of accident prevention. Bidrin is a new systemic insecticide from Shell Chemical Co. for control of bark beetles which carry Dutch elm disease fungi. Here is a valuable step-by-step description of proper techniques as shown at the University of Wisconsin.

CAREFUL PLANNING and training have become the hallmarks of pesticide use. The introduction of Bidrin, a systemic pesticide used to control "Dutch Elm Disease" and manufactured by the Agricultural Chemical Division of the Shell Chemical Co., has been accompanied by instruction and demonstration.

Public and private applicators have been trained by representatives from Shell, the Department of Agriculture, and the Department of Entomology of the University of Wisconsin. Joining with this team of experts has been the Hopkins Agricultural Chemical Co., sole distributor of Bidrin in Wisconsin.

A course of instruction was set up to train applicators who would be using the material. Applicators who attended the training sessions were issued permits by the State Department of Agriculture.

Subsequently, applicators were invited to Madison for a practical demonstration on use of the pesticide. Learning by doing, underscored by safe uses and practices, completed the training.

Applicators assembled at 10:00 a.m. in a public park (Fig. 1) and were given practical instruction by Professor Dale Norris, a member of the Department of Entomology, University of Wisconsin (Fig. 2). At the conclusion of his demonstration, and an extended question and answer period, ap-

plicators divided into groups and, under the supervision of experts, began to apply the pesticide to elm trees located in the park (Fig. 3).

For protection, applicators wore rubber suits and gloves and wore either face masks or goggles to avoid accidental skin contamination (Fig. 4). Each man had an opportunity to insert the aluminum tubes into trees which provide the vehicle for transferring the pesticide from the container into the tree. Practical instruction in this phase of the operation is vital since insertion of the tube cannot be done either by measurement or formula. It requires a "feel" which can be developed only by trial and error; the tube must penetrate the bark and tap into the cambium layer.

This step by step process helped to highlight the safe techniques which should be followed by all applicators. Use of a hammer rather than a hatchet was suggested for safety, thereby avoiding the risk of injury from a backswing of a hatchet (Fig. 5).

A special tool, used for inserting the steel conveyor tube provides safe placement of the tube in the tree. It was pointed out that the tube, when properly placed, should be parallel to the ground, and should not be inserted at an angle. Each tube is inserted breast high at a distance 5" to the right or left of the first tube so that the tree is ringed (Fig. 6).

Once a tube is properly inserted into the tree the plastic container, known as a Mauget injector, is then pressed together (Fig. 7) and inserted on the tube with the pesticide at the bottom (Fig. 8). A gentle push on the injector breaks the plastic seal inside the injector and allows the pesticide to flow into the tube. The injector is then inverted and allowed to remain in this position until empty (Figs. 9 and 10).

Once empty, injectors are then removed and discarded in a bucket. Safe disposal of expended containers is important. If they must be transported, the bucket should be covered. After collection they should be burned to avoid contamination.

The aluminum tubes are then removed with pliers; a slight twisting motion with the pliers facilitates removal. These tubes are then placed in a bucket for disposal (Fig. 11). Expended materials should be burned and the transporting container thoroughly rinsed.

Holes in the bark left by the tube are allowed to heal by themselves, but it is important to cleanse the area around them to avoid contamination (Fig. 12). Since Bidrin is highly soluble in water and alcohol, a spray solution of either can be used effectively.

To avoid contact, covering exposed skin areas is necessary, and protection of the eyes with a mask or goggles vitally important. "No smoking" should be observed at all times since the pesticide can be transferred from the hands to a cigarette or a pipe easily.

Only applicators who have been granted a permit will be allowed to use Bidrin, and their permit has been predicated on the course of instruction. A file of all permittees is maintained by the State Department of Agriculture.

Safe application in the use of Bidrin has marked every step in introducing this pesticide in Wisconsin and proves once again that the best method of instruction is the method that is constantly alert to accident prevention.