



Here today...



...goner tomorrow

**Ethion® kills chinch bugs . . .** ends destruction to lawns, parks and fairways. Ounce-for-ounce no pesticide outperforms it. Tests show just one application gives outstanding results and provides total control. And Ethion is easy-to-use, safe, economical, long lasting. U.S.D.A.-approved to curb sod webworms, halt mites in Bermuda grass, too. Write or call your supplier today for details.



TECHNICAL CHEMICALS DEPT., NIAGARA CHEMICALS DIVISION, MIDDLEPORT, NEW YORK

# VACATE X WEEDS


This new, fast way with VACATE...Diamond's new nonselective herbicide for dry application

This is it. The herbicide you hoped would come. The weed and grass killer that lasts more than one year. A patented feature of this killer is the chemically combined water which makes it dust free. It can be applied *any time* (most economical results are from spring or late fall spreading). It is easy to handle—requires no mixing, hauling water, or using expensive equipment.

This is Diamond's new VACATE, and it has many physical advantages over previous formulations for battling weeds and grass. VACATE offers economy of application and efficiency in performance.

VACATE can be used anywhere a weed- and grass-free

area is desirable. It controls all vegetation. Normal rainfall starts action—a total accumulated rainfall of an inch is ample. And it is safe . . . noncorrosive, nonflammable, and nontoxic. You ought to know the whole story. Write Diamond Alkali Company, 300 Union Commerce Building, Cleveland 14, Ohio.

VACATE is one of the  
 **Diamond  
Chemicals**

*When Writing to Advertisers Please Mention WEEDS AND TURF*

W-3

# Geigy

## **industrial** **WEED CONTROL** **is profitable business**

with

### **SIMAZINE or ATRAZINE**

**HERBICIDES**

Industrial weed eradication is a fast growing market. Custom application of herbicides is widespread, and the practice is growing. Industries and municipalities have become increasingly aware of weed problems, and are seeking ways to effectively eliminate this nuisance and potential fire hazard.

Many PCO's depend upon Simazine and Atrazine, Geigy's outstanding herbicides, for industrial weed control.

These herbicides can be used to eliminate almost all vegetation. One timely application, according to label directions, controls annual and perennial weeds for a full season or more. Simazine and Atrazine are safe to humans and animals, non-irritating to skin, non-flammable, non-corrosive and dependable in the results they provide.



#### **INDUSTRIAL WEED CONTROL MARKETS**

Roads, paths, industrial plants, sidings, race tracks, parking lots, around billboards, tennis courts, playgrounds, drive-in-theatres, firebreaks, fence rows, utilities, lumber yards, oil tanks, water works, and many, many other sites in your service area.

For free 12 page, full-color brochure on Industrial Weed Control, address Department PC-3.



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**VERTICALLY . . .**



**HORIZONTALLY . . .**



**YOU ALWAYS GET  
PERFECT PERFORMANCE . . .  
WITH THE DEPENDABLE . . .**



**HARDIE AERO-MIST  
SPRAYER DUSTER**

Here's the one unit that gives you just what you want . . . when you want it. The famous Hardie Aero-Mist Sprayer. It embodies the recommendations of State & Federal authorities; tree service organizations and foresters who sought in one unit a high-velocity ample air volume sprayer for any type job, along with low price.

With its high velocity, 150 mph, it is of special value in the treatment of trees infested with the bark beetle. Public Health officials also use the Hardie for mosquito control. With the attachment of the Hardie Duster, you have two machines in one. You can use either spray materials; dust or granular materials. Write for full details.

**HARDIE  
SPRAYERS**

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**WEEDS and TURF**

PEST CONTROL

A SECTION OF PEST CONTROL MAGAZINE

March, 1963

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**Four steps**

Young, growing industries are always beset with problems, some of which come from within the ranks, some which come from outside. Custom spraying is no exception.

One of the most persistent and irritating headaches facing America's contract applicators today is an internal one:

How can we as businessmen make sure our competitors and fellow spraymen maintain a high code of ethics?

And the answer is simple enough; every CA should be certain his *own* business practices set an example of sound, responsible, conscientious habits.

To do this it is necessary to get a clear picture of the building blocks needed to construct an ethical house.

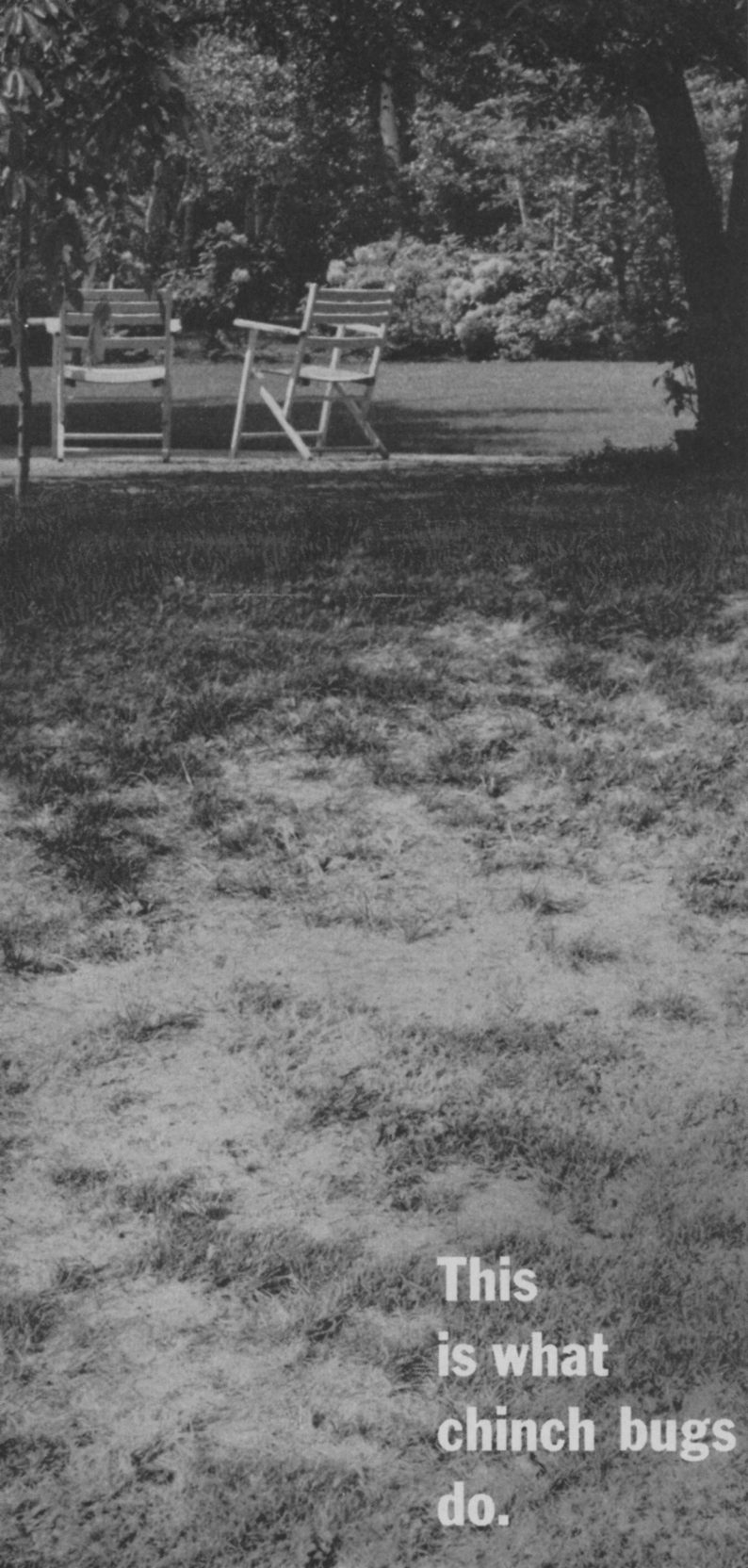
First, and most obvious, reputable spraymen know they shouldn't skimp on quality of work performed. This means proper and adequate chemicals, and thorough application.

Second, prices should not be set exorbitantly high just to make unreasonable profit. This is very rare. What is more common, and equally wrong, are prices which have been shaved just to get business, but which are not high enough to leave any profit. This is as unfair to the price-cutting company and its employees as it is to competitors.

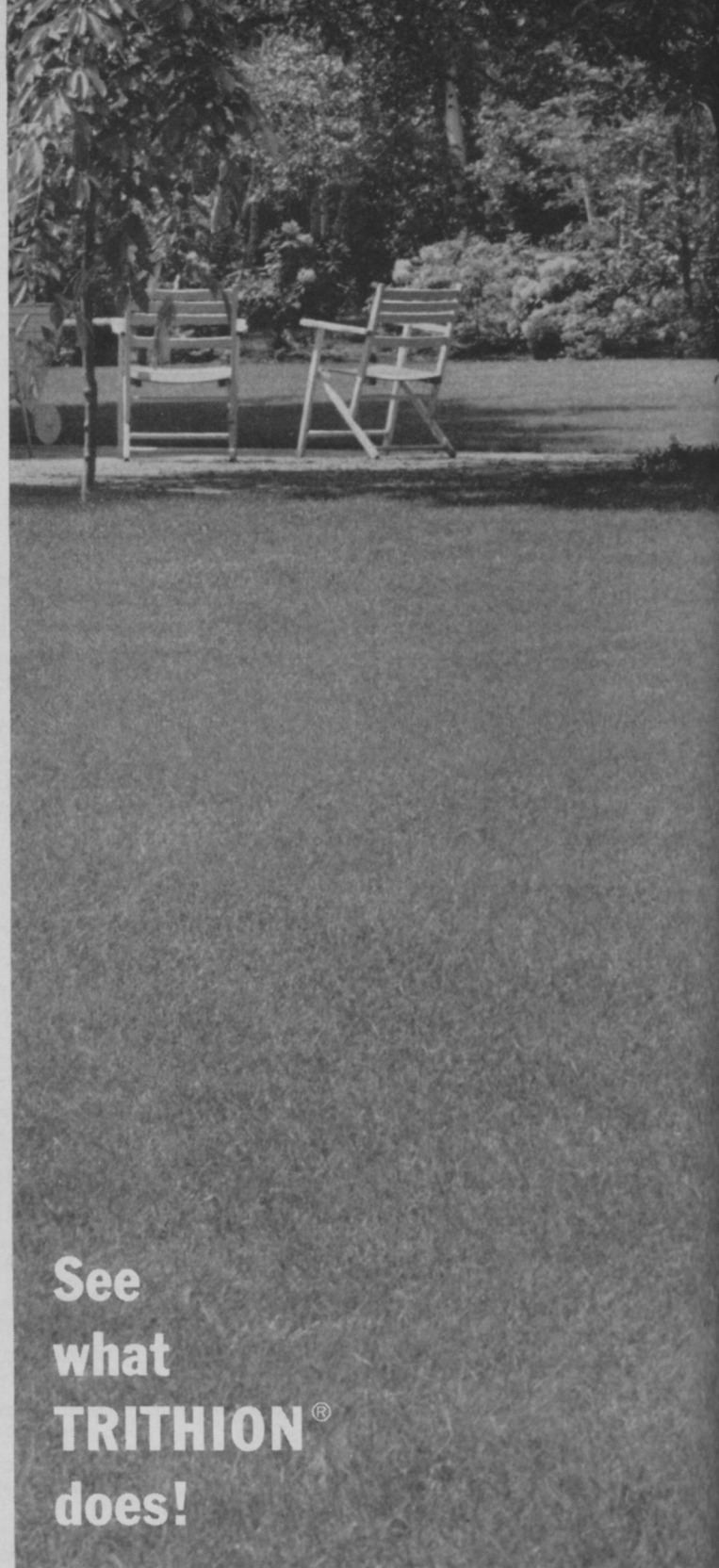
Third, advertising methods should be based strictly on facts, and should not mislead present or potential customers in any way.

Fourth, ethical applicators should not belittle competitors when making a sales call. If there are complaints about a rival firm, they should be worked out by the men involved, either privately, or through a local business or trade association.

*Four simple steps.* It seems these guides to ethical business are already practiced by most spray companies. But for the few whose thinking is a little cloudy, it's worth reviewing them again.



**This  
is what  
chinch bugs  
do.**



**See  
what  
TRITHION®  
does!**

Customer satisfaction—permanent patronage—requires sure, consistent results: the kind you can guarantee when you use TRITHION insecticide for lawn chinch bug control.

Chinch bugs are small sucking insects that feed on the juice in leaves and stems of grass, causing brown patches and eventual death of infested lawns. Chinch bug destruction is a growing problem around the country . . . but one you can solve with TRITHION.

Since 1960, thousands of lawns have been treated with TRITHION. Results have been outstanding!

TRITHION gives quick, positive control. It's a fast-acting compound that controls *all* chinch bugs, even those resistant to other materials.



TRITHION is easy to handle safely. It is less hazardous to handle than many other organic phosphate pesticides. TRITHION is an easy-to-apply emulsifiable liquid . . . and also is available in granular form.

TRITHION offers one-shot control . . . that lasts. Repeat applications are rarely needed with TRITHION—"one-shot control" stops chinch bugs. Its long residual action means long-term protection . . . with resulting reduced costs.

Use TRITHION on *your* customers' lawns. You'll boost and *maintain* the demand for *your* service. For details, write Stauffer Chemical Company, Agricultural Chemicals Division, 380 Madison Ave., New York 17, N. Y. ©Stauffer's Reg. T.M. for an insecticide-necaricide

easy turf and weed control—  
with a famous

# FONTAN



**THE R.5 FONTAN FOR HEAVY DUTY  
WEIGHT 37 LBS.**

A self-contained unit, the Fontan has jets to interchange for misting or spraying, another attachment to interchange for dusting. Designed for versatility, dependability and safety, the Fontan has metal frame and padded straps for comfortable operation.

**FONTAN + MALATHION = ECONOMY**

The Fontan adjusts to allow low-volume spraying with less dilute liquid and a higher concentration of Malathion or other chemical. Both Fontans offer complete portability, choice of droplet size, easy maintenance, safe fuel injection, corrosion-resistant plated parts.



**THE R.6 FONTAN FOR SMALLER JOBS  
WEIGHT 24 LBS.**

A torch interchanged with the spray head and nozzle converts either Fontan into a flame thrower for weed killing, snow removal, burning off paint, heating tar for roofs and street repairs, and numerous similar tasks.

SOUTHERN MILL CREEK PRODUCTS COMPANY, Inc.  
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Please send further information on:  
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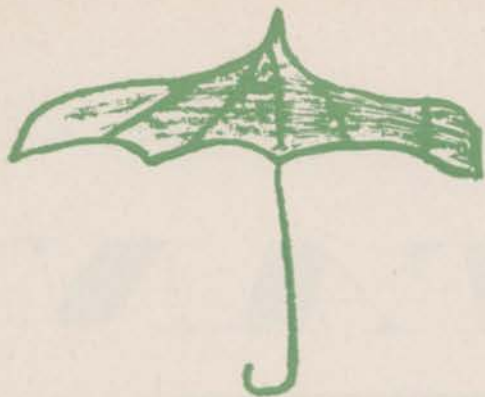


**Southern** MILL CREEK PRODUCTS COMPANY, Inc.

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W-7



## concentrated COVERAGE

**I**S your sales promotion plan all wet?

Come in out of the rain, and let *Weeds and Turf's* concentrated coverage protect you from wasted effort and help you sell more products to the multibillion dollar weed control and turf and ornamentals spraying market.

Advertisers who've used *Weeds and Turf* tell us the inquiries flow in by the bucketsfull.

We've got a responsive audience. And an important one.

How do we do it? We speak their language. We offer practical information. We devote all of our time to the industries we serve.

Sound like a big job?

It is. But it's worth it. Readers tell us they use *Weeds and Turf*. It helps them make more money.

Then they turn right around and spend more on chemicals and application equipment because they need them.

Herbicides. Fertilizers. Power spray rigs and smaller equipment. Insecticides. Fungicides. Nematocides. Uniforms. Insurance. Laboratory equipment. Books.

You sell any of these?

Our readers believe in *Weeds and Turf*. And this loyalty carries right over to smart merchandisers who advertise their quality products to the men who buy, and buy in quantity. Here's the

way to advertise to volume users.

Who are they?

Contract Applicators, mostly. And railway, highway and utility men. And state and civic officials.

But only those interested in weed control or turf and ornamentals care.

Nobody else reads it. You get concentrated coverage among the people who do the buying.

We mail 10,000 copies every month, to all 50 states and 52 foreign countries.

We have information we'd like to send you if you're interested. Useful market data, circulation statement, rate card, so forth.

Write us.

**WEEDS and TURF**  
PEST CONTROL



# CHLORDANE

for broad protection of lawns and crops  
**Controls Crabgrass • Insects • Grubs**



Chlordane is a money-maker for Formulators, Custom Spray Applicators and PCO's because it is both economical and effective. It protects lawns and crops two ways: 1) Controls crabgrass without harming established lawns. 2) The same application also controls turf pests such as ants, chiggers, white grubs, Japanese beetle larvae, and chinch bugs.

Yet the price of Chlordane is competitive with single-purpose chemicals. ■

When used as a soil treatment against

termites, Chlordane has shown its protective power for at least five years.

■ This multi-purpose product also has been used successfully for many years against household insects such as roaches, mosquitoes, flies, spiders, wasps, silver fish, bedbugs, etc. ■ Chlordane is available in both refined and agricultural grades, and in a wide range of dusts, granules, wettable powders, oil-soluble and emulsifiable concentrates.

Write Prentiss for information.

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PRODUCTS

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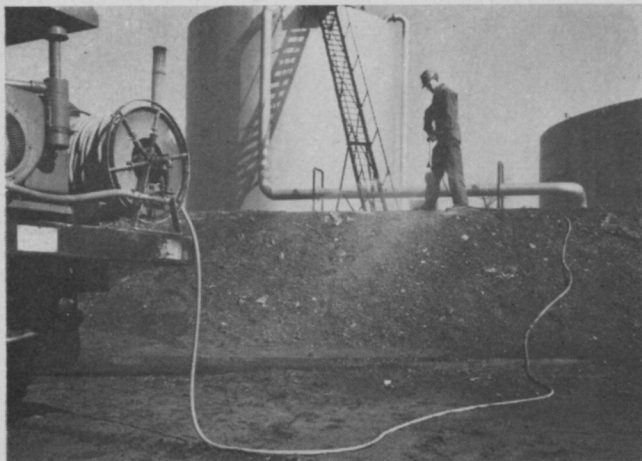


## Prentiss Drug & Chemical Co., Inc.

101 WEST 31st STREET, NEW YORK 1, N. Y. • 9 SOUTH CLINTON STREET, CHICAGO 6, ILL.

Atlanta • Detroit • San Francisco • Los Angeles • Toronto • Montreal • Fort Worth • Pittsburgh • Philadelphia





Tank farms make good business for weed controllers.

## SOIL STERILIZATION for weed control...

*What it means —*

*What chemicals to use —*

*When to apply —*

**S**OIL sterilization consists of placing nonselective herbicides on or in the ground in such a manner that they will persist in the soil, clinging to soil particles so that both established plants and germinating seedlings will be killed.

This technique does not kill all life in the soil, in the normal sense of the word "sterile," but rather makes soil unfit for green plant life to survive. To be effective, an herbicide must be present so that no seedlings escape contact with it, or must be of such molecular structure that it is readily absorbed by developing seedlings.

Long-term sterilization herbicides are usually dependent upon rainfall or irrigation to leach or percolate the activated herbicide to that zone in the soil where it will affect the germination of seeds and kill established plants. Soil type interacts with herbicide solubility to affect the amount and speed of leaching. Light soils tend to hold herbicides less; heavy soils retain chemicals more readily. Light soils, however, are more easily treated because there are less microorganisms to act upon the herbicides.

Success of a soil sterilant herbicide is also dependent upon the ability of the compound to resist decomposition or breakdown by soil microorganisms, leaching, adsorption, chemical decomposition, and light deactivation.

Herbicidal compounds vary in their ability to sterilize soil. We will examine those compounds which are commonly used in what is termed industrial or noncrop-

land soil sterilization after we examine the markets for this technique.

Most contract applicators are probably already aware of the potential market for soil sterilization. Industrial sites require semi-permanent vegetation control when weeds become unsightly or interfere with safe operations. The oil industry, for example, engages contract applicators to control weeds on oil fields, around refineries, tank farms, and distributing and metering stations, so that fire hazard around flammable products will be reduced or eliminated.

Railroads, airfields, highways, power transmission lines, drainage canals, reservoirs, and other rights-of-way use weed control, including soil sterilization, to maintain unhampered and safe operations. Occasionally the food industry uses soil sterilization because less trouble from rodent predation results when adjacent weedy fields are cleared of weeds and accompanying rat harborages. Private and municipal recreational areas are using weed control,

mostly selective, but sometimes a nonselective long-term type, to insure the comfort of patrons. See also *Weeds and Turf*, July 1962, page W-4, and August 1962, page W-4, for more market data.

Since a "weed" is defined as any plant growing where it is not wanted, any site where plants cause trouble should be treated by a professional CA well versed in the fine points of soil sterilization.

There is an apparent simplicity implied by fact that "chemicals are sprayed and weeds don't grow." Although this may be true to a degree, there are several variables the successful CA must know about in order to eliminate the possibility of failure and expense of re-treatment or injury to desirable plants nearby.

All herbicides interrelate with rainfall, temperature, soil texture, fertility, application date, weed species, and weed tolerance, to challenge the applicator and his arsenal of weed weapons.

These variables, of course, differ with each geographical region and local area, so they are too numerous to be individually explained

**Sidings and railway yards** are often contracted to professionals for weed control. Much of the "big mileage" railway work is let out, too.

