
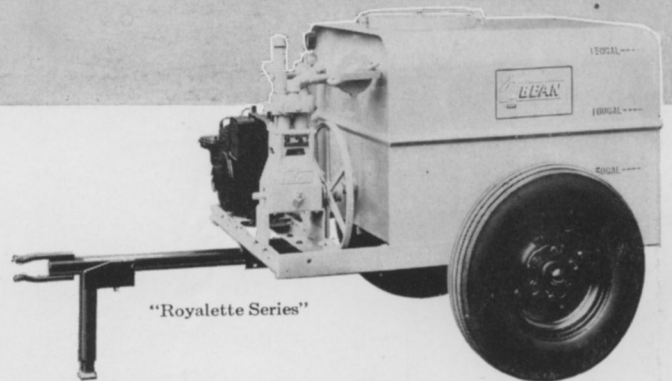


leadership  *engineering* pushes performance up - prices down

JOHN BEAN: CHOICE OF CUSTOM OPERATORS



John Bean leads the way when you "spray for pay". You select from four basic sprayer series . . . plenty of choice to let you get size, type, capacity and price just right for your needs. Bean Bond lined tanks and lifetime Sapphite cylinders assure long, trouble free service. Trailer-type, skid-mounted or PTO models. Wide choice of accessories. Versatility unlimited: weed and brush control, turf spraying, applying liquid fertilizer, shrub and tree spraying, root feeding, dust abatement, row crop spraying. To be sure sprayday is payday, get the facts on John Bean high-pressure sprayers.



"Royalette Series"

CHOOSE FROM FOUR BASIC SERIES

- "ROYAL" SPRAYERS—25 to 60 GPM, pressures to 800 p.s.i., 200 to 1000-gallon tanks.
- "ROYALIER" SPRAYERS—15 to 20 GPM, pressures to 400 p.s.i., 200 to 500-gallon tanks.
- "ROYALETTE" SPRAYERS—5 to 10 GPM, pressures to 400 p.s.i., 50 to 300-gallon tanks.
- "TROJAN & SPARTAN" SPRAYERS—Mobile, push-type. 3 GPM, 60 p.s.i. (Trojan) or to 300 p.s.i. (Spartan)

GET THE FACTS! Clip coupon to your letterhead.

- Royal Royalier Royalette Rotomist Mist-Type Sprayers
 Trojan-Spartan Mosquito Control Facts Dutch Elm Disease Facts



JOHN BEAN DIVISION

Lansing, Mich. - Orlando, Fla. - San Jose, Calif.



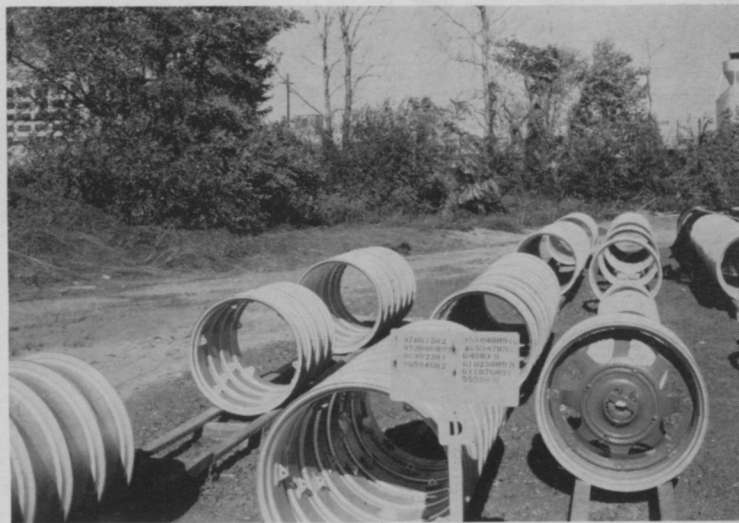
Control hard-to-kill perennial and annual weeds and grasses with new Hyvar® X-WS bromacil weed killer. Vegetation in the foreground and to the left above was effectively controlled with one application of "Hyvar" X-WS; area in right background was not treated. Maintenance cost is reduced by using long-lasting, effective "Hyvar" X-WS.



Easy-to-use "Hyvar" X-WS controlled weeds and grasses around the fence line. Once stirred into solution "Hyvar" X-WS doesn't require additional mixing or agitation. It's easily applied with simple equipment such as knapsack type sprayers. Expensive hand clipping is eliminated when you use "Hyvar" X-WS.



Fire-hazardous vegetation was controlled with Hyvar® X bromacil weed killer in the lumber yard area above. "Hyvar" X is a wettable powder formulation for use in sprayers equipped with adequate agitation. After application "Hyvar" X gives the same effective control as new "Hyvar" X-WS. All Du Pont weed killers are non-volatile, non-flammable, non-corrosive and low in toxicity to man and animals when used as directed.



Moisture-holding vegetation that tends to rust expensive equipment was controlled here with Karmex® diuron weed killer. "Karmex" is a versatile weed killer that gives long-lasting economical control of unwanted vegetation. By removing undesirable weeds and grasses in storage and other areas with "Karmex," employees' working conditions are improved and tool and material losses are decreased.

WEEDS!

A menace to everyone/profits for you

There's money in weeds, if you're on the right side of them. Du Pont weed killers make custom weed control jobs easy, effective and profitable for you. Check the typical problems pictured above. Chances are you'll see similar ones within a mile of where you're standing, and that you can solve them with Du Pont weed killers.

In addition to weed control, Du Pont Ammate® X weed and brush killer and Dybar® fenuron weed and brush killer offer your customers effective brush control. "Ammate" X is non-volatile... brush near crops or desirable plants may be sprayed without harmful fume damage when it's used as directed. On light-to-medium stands of brush, easy-to-use pellets of "Dybar," applied right from the package, do an effective job. For complete information, mail the coupon to Du Pont today.

On all chemicals, follow labeling instructions and warnings carefully.



WEED & BRUSH KILLERS

Better Things for Better Living...through Chemistry

**Du Pont—Industrial and Biochemicals Department
Room 2311 A
Wilmington, Delaware 19898**

Please send me more information on Du Pont Weed and Brush Killers.

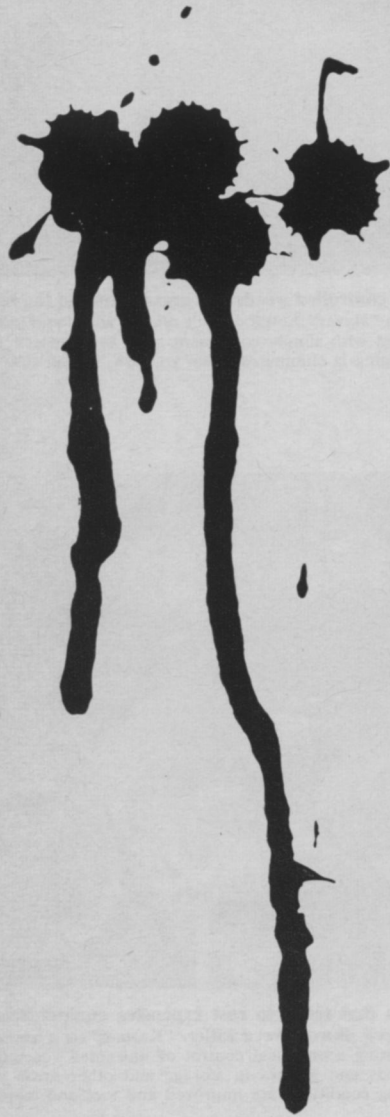
Name _____

Company _____

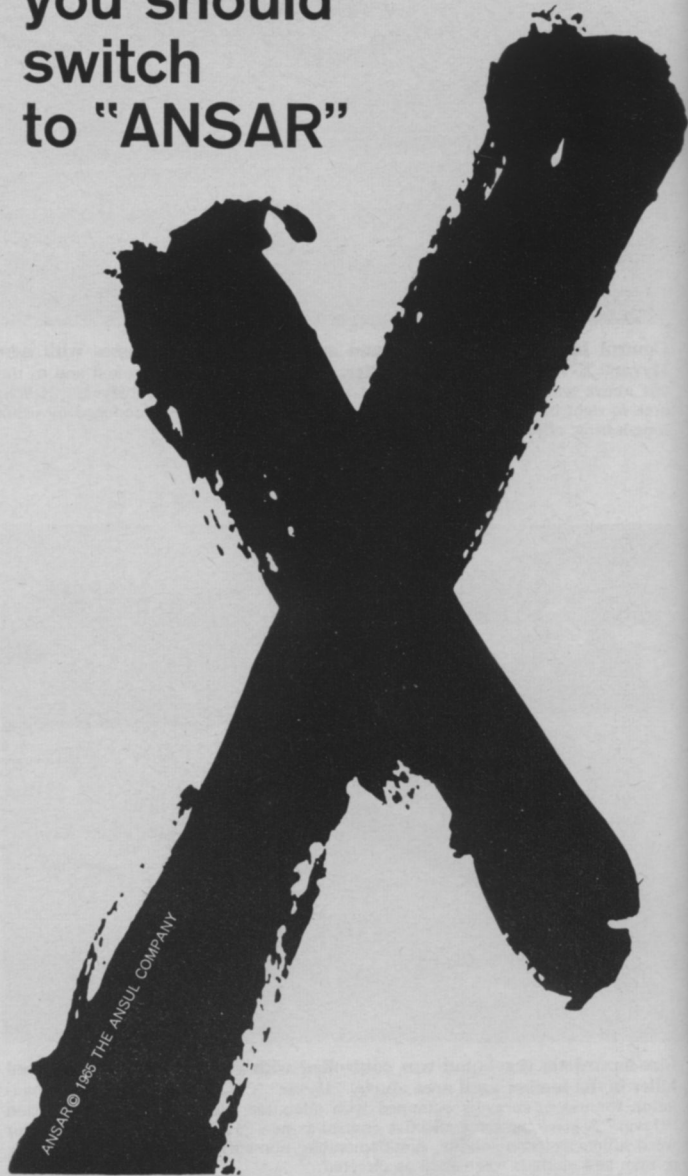
Address _____

City _____ State _____ Zip Code _____

If you're still
using weed oil



here's why
you should
switch
to "ANSAR"



"Ansar 560" is a non-selective, general herbicide. It completely eradicates all weeds and vegetation along roadways and ditches, around buildings and in other non-crop areas. If you've been using weed oil to do these jobs you'll find "Ansar 560" vastly superior in at least five important ways: (1) It's more effective and perhaps a little cheaper. (2) There is absolutely no residual toxicity, (3) no staining, and (4) not nearly as much corrosion of your spraying equipment. (5) You'll eliminate the storage problem because one gallon of "Ansar 560" (which is

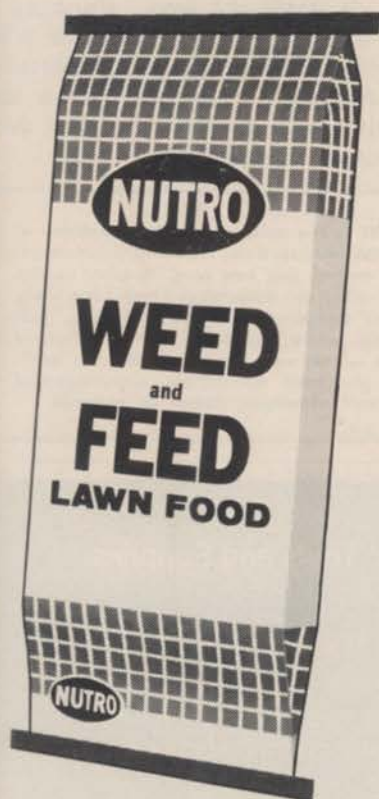
mixed with water when you're ready to apply it) is equivalent to 50 gallons of weed oil.

"Ansar 560" has been thoroughly tested and proven in use. It's just one of a broad line of "Ansar" weed control chemicals which include selective herbicides to meet your particular needs in a variety of formulations—solid crystals, liquid and liquids with surfactant. For complete information see your own farm chemicals dealer, ask your county agent or write

THE ANSUL COMPANY, MARINETTE, WISCONSIN



BRAWNY KILLING- POWER!



Break the strangle-hold of weeds with easy-to-use Nutro Weed and Feed. Two powerful weed killers (2,4-D and 2,4,5 TP) destroy dandelions, ragweed, plantain, buckhorn, nettle and other broadleaf weeds. Kills chickweed, henbit and related types in their season, too.

Nutro Weed and Feed includes a tri-nitrogen formula. Fast-acting, long-lasting nitrogen greens-up grass in a hurry and keeps it that way. Helps grass fill in where weeds were before.

A product of SMITH-DOUGLASS

WEEDS TREES and TURF

FORMERLY WEEDS AND TURF

March 1965
Volume 4, No. 3

Features:

Present and Future Uses of Herbicides in Ornamentals By Dr. J. F. Ahrens	12
Turfgrass Portraits IX: St. augustinegrass By Dr. Robert W. Schery	16
Turf Specialists Focus on Water Needs, Practices, At 36th Int'l Turf-Grass Conference in Cleveland	18
Californians Aflame with New Weed Control Notions At Biggest Conference Ever, Jan. 19-21 in Fresno	20
Aquatic Weed Controllers Review Herbicides, Examine Nonchemical Methods at Fifth Annual Affair in Chicago	26
Small Homeowner Contracts May Grow to Be Big Business For Arborists, Felix Tells 15th Annual N. Y. Tree Group By Prof. A. M. S. Pridham	33
Turf Tips, Arborist's Advice, and More— All on Agenda for 26th Ohio Hort. Course	34

Departments:

Editorial: The High Road to Profits	6
Letters	8
Know Your Species: Prostrate Spurge	24
Meeting Dates	32
Classified Ads	36
Advertisers Index	36
Trimnings	38

JAMES A. NELSON
Publisher

CHARLES D. WEBB
Editor

DAVID E. SCHNEIDER
Staff Biologist

D. BUNKIN
Circulation Supervisor

Advertising Representatives
National Headquarters
1900 Euclid Avenue
Cleveland, Ohio 44115
Phone: Area Code 216+771-4169

New York City
Billingslea & Ficke
420 Lexington Avenue
Phone: 212+532-1632

Chicago
Peck & Billingslea, Inc.
185 North Wabash Ave., Suite 1809
Phone: 312+DEarborn 2-0292-93

West Coast
The Maurice A. Kimball Co., Inc.
Los Angeles: 2550 Beverly Blvd.
Phone: 213+DUnkirk 8-6178
San Francisco: 580 Market Street
Phone: 415+EXbrook 2-3365

WEEDS TREES AND TURF is published monthly by Trade Magazines, Inc. Executive, editorial, and advertising offices: 1900 Euclid Ave., Cleveland, Ohio 44115. Publication office: Corner of East North St. and Cadwallader St., Fostoria, Ohio. Send all correspondence to WEEDS TREES AND TURF, 1900 Euclid Ave., Cleveland, Ohio 44115.
Single Copy Price: 50 cents for current issue; all back issues 75 cents each. Foreign \$1.00.
Subscription Rates: U.S. and possessions, 1 year \$3.00; 2 years \$5.00. All other foreign subscriptions, 1 year \$4.00; 2 years \$7.00. **Change of Address:** Three weeks advance notice is necessary for change of address. Both old and new address must be given. Post Office will not forward copies. Third Class postage is paid at Fostoria, Ohio.

Contents of this Issue © Trade Magazines, Inc., 1965

The High Road to Profits

It's possible that vegetation maintenance and control contractors will hit the high road to profits in the managed economy which lies ahead of us. No less a person than the *New York Times* columnist James Reston indirectly pointed this out in one of his recent columns.

Reston was discussing the persistent millstone of unemployment which thrives even in our nation's unparalleled prosperity. Reston feels that even though we apparently have learned to regulate the economy sufficiently to preclude inordinate highs and lows, the problem of unemployment will remain with us. Among the possible solutions the *Times* writer proposed, was greater expansion of service industries into the burgeoning areas of affluence which exist now, and which will doubtless grow. He even singled out "garden services" as one of these industries.

While his concept of "professional gardening" for well-heeled suburbanites was mentioned only in passing and was not elaborated on, it suggests a good potential for aggressive managers who wonder where they will be tomorrow.

No business will progress long, as will no nation, without a master plan which considers the general direction of the economy at large. And all indications are that the future will continue to bring us an increase of homeowners who (1) don't want to be bothered working around their

home grounds when the time can be spent making more money, or enjoying recreational pursuits with money already made; and (2) have the means to pay a service firm to handle, with skilled dexterity and responsible performance, the multitude of jobs which are necessary to achieve an attractive and healthy environment.

Opportunities, then, for turf maintenance enterprises, for tree companies, or for contractors who offer a complete line of these activities, will abound. To make the most of them, however, requires first an awareness that the potential does indeed exist, and second the fortitude to go out and educate these customers-to-be that they can afford, and should afford, to pay a professional to look after their lawns, shrubs, and trees.

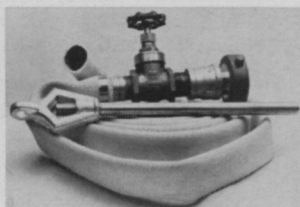
Living in a society which is as complex in every way as ours, is itself not easy. Running a profitable business is even harder. But those who adjust to the new way of American life, especially service-oriented companies which thrive on the consumer's well-being, will grow in the next decade as they have never grown before!

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.

HARDER... Featuring the Finest in Tree Surgeons' Tools and Supplies

SPRAY HOSE

U.S. Rubber, High Pressure insecticide Matchless "800" spray hose, 800 lbs. P.S.I. Neoprene tube and cover, specifically designed for use with oil base emulsions, as well as, wettable powders. Built to withstand pulsating pressure and shocks from nozzle shut-off.



HIGH PRESSURE BRASS HOSE COUPLINGS

No objectionable projections, won't rut lawns, or catch on curbs, corners, etc., full flow design with standard bursting pressure and allows for full flow. Available for 1/2" hose and 3/4" hose.

HYDRANT FILLER ASSEMBLY

Speed up your spray tank filling operation by utilizing our special spraying filler assembly for use with fire hydrants. Our assembly consists of: Hydrant coupling adapter* with 1 1/2" gate valve and hose thread adapter; 20 feet 1 1/2" fire hose.

*Fits National Standard and New York City

Write, wire, or phone for complete prices on these Harder special feature items. If you're not receiving our monthly specials, write today to get on our mailing list.

HARDER ARBORIST SUPPLY CO.

A Name You Can Trust / Box 111, Hempstead, N.Y. / 516 IV 1-8800



Here's how easy it is to get long-lasting control of nematodes and soil insects that ruin turf

- A single spray of Nemagon® Soil Fumigant kills root-choking nematodes all season.
- A single application of dieldrin insecticide controls root-pruning insects for years.

THE FACTS that follow quickly explain the essential value of controlling soil pests with Nemagon and dieldrin; their flexibility and ease of use; why the root protection they provide far outweighs the cost of treatment.

Nematode control with Nemagon

Nemagon works as a pre-planting application or on established turf. It fumigates the root zone to kill the nematodes (microscopic worms, not insects) that can infest soil in fantastic numbers. All damaging species are controlled and reinfestation will normally not occur for a year or more.

Without the root knots and lesions caused by nematodes, water and soil



Protecting a golf green with Nemagon eliminates any chance of unsuspected nematode infestation causing costly damage and disrupting play.

resodding.

Nemagon is easily drenched into soil following a spray application. There's no need for special equipment and grass isn't disturbed. Easy-to-follow directions are printed on every package.

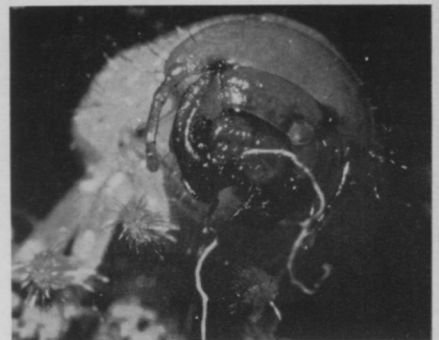
Soil insect control with dieldrin

Dieldrin controls all species of grubs, including the larvae of Japanese and June beetles. It can be used ahead of time to prevent damage from ever starting. Or you can apply dieldrin to stop an infestation when discolored turf indicates that soil insects are pruning roots and limiting the crop's access to fertilizer and water.

Dieldrin can be applied any time after soil warms up. Effectiveness usually lasts 3 to 5 years. Control is so thorough that grub-eating moles and rodents can't find food in the treated area and leave.

Dieldrin can be put on in fertilizer, or in granular form. Liquid concentrates and wettable powders are available for spray use and drenching.

Full details on using dieldrin for



This root-chewing white grub can kill turf or make it look sick. So can a host of other grubs and soil insects. Dieldrin stops them all.

control of soil or surface insects are on every package label.

Nemagon and dieldrin are both available as branded products of well-known manufacturers and sold where you normally buy insecticides, and other turf maintenance products.

For more information, write Shell Chemical Company, Agricultural Chemicals Division, 110 West 51st St., New York, New York 10020.

Follow label directions carefully when using any pesticide.



A Nemagon spray knocks out nematodes fast, and thoroughly. Turf isn't disturbed. And nearby plants won't be injured.

nutrients can pass freely through roots. Turf can respond fully to fertilizer and irrigation. Risk of stunting, poor appearance and dead patches is eliminated. So is the risk of a reseeding or

Shell Chemical Company
Agricultural Chemicals Division



METALSALTS CORPORATION



LEADER

in
microbiological control



serving the agricultural,
chemical industry and the
garden and turf suppliers
with . . .



TURF FUNGICIDES

Phenyl Mercurials
Cadmium Compounds
Thiram Compounds
Mercurous Chloride
Bi-Cal



custom formulations



AGRICULTURAL FUNGICIDES

Phenyl Mercurials
Methyl Mercurials
Oxyquinolines

Formulators Inquiries
Invited



METALSALTS CORPORATION

U.S.
200 Wagaraw Road, Hawthorne, N.J.

Canada:
Metasol Division, Canada
333 Canal Road, Montreal, Quebec

WTT Mailbox

Boosts Professionalism

I am very pleased to note the editorial in the November, 1964, issue of *Weeds Trees and Turf*, "Setting A Good Example." This, it seems to me, is good advice for many of our horticultural activities. I like, very much, your emphasis on professional status of the industry. We in the nursery industry could use a little more of this feeling, both within our industry, and in creating the image of professionalism among our clients. It has been discussed at great length at some recent meetings of the American Association of Nurserymen Education Committee.

I am also very much pleased to see, in the same issue, the reporting of the Minnesota Shade Tree Conference, held recently at the University of Minnesota St. Paul campus. You have done a good job in reporting this and I think the conference has helped to stimulate an awareness on the part of park superintendents, golf course operators, and others, that there are several species that are well adapted to the area. This is a good article.

Vincent K. Bailey

J. V. Bailey Nurseries
St. Paul, Minn.

Plastic Weeds for Study?

Would it be impractical for some manufacturer to reproduce weeds in plastic—in color—and sell them to schools, golf courses, parks, cemeteries; every place where weeds are studied or there is a weed problem?

H. R. Rubendall

Freeport Country Club
Freeport, Ill.

This idea has so many possibilities in weed education programs that we present it here for all to read.—Ed.

Needs a Lift

Please furnish us with the names and addresses of manufacturers and/or distributors of the following described equipment: A one-man, mobile, self-propelled unit with personnel boom. Used in tree pruning, thinning, spraying, fruit pick-

ing, etc. Also the trademark name of equipment, if known.

R. M. Huntley

Advertising Manager
Weed Control Service, Inc.
P.O. Box 6527
Portland, Oregon, 97223

We regret we cannot help on this, but we publish your request here in the event that our readers may know of equipment of this type and will share the information with you.—Ed.

Correction

We have noticed on Page 34 of the December, 1964, *Weeds Trees and Turf* that Armour Agricultural Chemical Company is listed as handling our product, "Milorganite."

We feel that a retraction would be in order on this, in that Milorganite is handled exclusively by The Milwaukee Sewerage Commission and its exclusive franchised distributors.

Charles G. Wilson

Sales Manager and Agronomist
Milorganite Turf Service
Sewerage Commission of the
City of Milwaukee
Milwaukee, Wis.

Weeds Trees and Turf sincerely regrets the error.—Ed.

Wants WTT Expanded

You do an excellent job and I approve the inclusion of "Trees" as part of your new name. Spraying ornamentals, fertilizing, and general care, including pruning, is my main interest, although a good portion of my work deals with pest control of indoor plants.

I'd be delighted to see you expand your magazine to include more on maintenance of plantings around homes.

James H. McNally

1255 Galvez Drive
Pacifica, Calif.

A rather extensive article on new herbicides for use in ornamentals appears on page 12. Also, articles dealing with subjects closely allied to ornamental spraying will appear throughout the year.—Ed.

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

At the Powelton Club, Grass Stops Growing.



Newburgh, New York: This summer acres of grass stopped growing at the Powelton Golf Club of Newburgh, New York. The grass was treated with MH-30[®]T by Powelton's Golf Course Superintendent, William Smart.

Mr. Smart reports: "MH-30T pays for itself in the first 14 hours of labor you save. If you have an acre of rough hillside, you'll break even the first time you don't have to mow. Every mowing you skip after that is pure savings. And you get the bonus of having the grass look neat all the time instead of for just a few days at a time. I will use MH-30T again this spring. About 10 gallons will do my needs."

Read about a revolutionary chemical that controls the growth of grass without harming it in any way.

An amazing chemical is dramatically reducing the expense of cutting grass throughout the country. This chemical is called MH-30T.

A single spraying of MH-30T controls the growth of grass for an entire season. Here's how it works:

MH-30T temporarily stops cell division (this is what makes grass grow). It does not affect cell expansion. This means, grass gets thicker, lusher, and often greener, instead of taller.

The effects of MH-30T gradually wear off late in the growing season. And the grass grows slightly. (The actual amount of growth varies

from region to region.) It may have to be cut once or twice a year. Three times if you're extra fussy.

Thousands of acres of highway grass in Connecticut have been treated with MH-30T. Now, mowing costs each year are \$20 an acre instead of \$70 in hard-to-mow areas. MH-30T is also controlling grass at cemeteries, parks, golf courses, military bases, and airports all across the country.

Find out what MH-30T can do for you. Fill out the coupon and send for our illustrated brochure.

MH-30[®]T

©MH-30T is U.S. Rubber's registered trademark for its maleic hydrazide.

U.S. Rubber, Chemical Division,
Dept. W3, Naugatuck, Conn.

Please send me a brochure on MH-30T. I understand that MH-30T is for commercial use only.

NAME _____

FIRM _____ TITLE _____

ADDRESS _____

CITY _____ ZONE _____ STATE _____

Chemical Division

UNIROYAL
U.S. RUBBER



Geigy herbicides produce dead weeds and new business

There are untapped profit opportunities for you in the field of chemical weed control. Geigy herbicides enable you to realize this potential because of product superiority: a single spray works through the entire season to control most annual broadleaf weeds and grasses.

Results the easy, economical way

With Atrazine 80W or Simazine 80W, you give your clients weed control they can count on. You make one application of Atrazine before weeds are up or shortly thereafter, or spray Simazine before weeds break ground. Rainfall carries either herbicide to the weed root zone where it is picked up by germinating weeds. Weeds die soon after emergence. And, as later weeds germinate they are killed as well. No continuing control problem . . . no repeat sprays for you to put on.

Every job an advertisement for you

At every type of installation where weeds are a problem—industrial, commercial, institutional, roadside—the results of your work are seen and noticed. New business will be referred to you, as the weeds you have sprayed continue to be controlled by Geigy herbicides.


Safety added to effectiveness

Geigy herbicides, used according to label directions, deliver outstanding weed control, coupled with safety to humans and animals. Nonirritating to the skin and noncorrosive to equipment, Atrazine and Simazine can be removed from tanks and lines by flushing with plain water.



Valued service

Weed control, like pest control, is a professional specialty, requiring "know-how" in choice of material as well as application technique. Select the right Geigy herbicide to solve each weed control problem, and you perform a valued individual and community service . . . one which will bring you profitable returns. For full details on highly effective weed control write to:

Geigy Agricultural Chemicals, Division of Geigy Chemical Corporation, Saw Mill River Road, Ardsley, N. Y. 

Geigy
CREATORS OF CHEMICALS FOR MODERN AGRICULTURE
Atrazine Simazine

