what to do about TURF DISEASES AND BROADLEAF WEEDS:



Use Velsicol[®] "2-1" Turf Fungicide To Control Brownpatch and Dollar Spot

Velsicol 2-1 is a mercuric fungicide that can be used for either preventive or curative treatment of brownpatch and dollar spot. It's a pleasure to use. It's made in a new formulation that has greater wettability, more stability in suspension and less foaming action than any other comparable product. With 2-1, you'll find application is easier, coverage is more even, and equipment wear is greatly reduced.

Use Velsicol® Memmi .8EC to control turf diseases

Velsicol Memmi .8EC is a mercuric fungicide in emulsifiable concentrate form. Mixes fast, needs no constant agitation, and leaves no sediment in tanks. Use it for better control of brownpatch, copper spot, melting out (Helminthosporium) and dollar spot in St. Augustine, Bermuda, and Zoysia grasses, for gray leafspot in St. Augustine, and for cottony blight (Pythium) in Ryegrass.

Use Banvel® D 4S To Control hard-to-kill broadleaf weeds

New Banvel D 4S gives excellent control of knotweed, common chickweed, clover, red sorrel, mouse-ear chickweed, stitchwort, dog fennel, chicory, curly dock, and many other hard-to-kill broadleaf weeds. It works two ways, on leaves and roots, for complete kill. Banvel D 4S is also effective in cool weather. Let it help you build your reputation for weed control.

VELSICOL TURF CHEMICALS

FOR COMPLETE TURF PEST CONTROL

Velsicol® "2-1" Fungicide ■ Banvel® D 4S (Herbicide)

Velsicol® Memmi .8EC (Fungicide) ■ Pestmaster® Soil Fumigant-1
Chlordane and Bandane® Pre-Emergence Crabgrass Control
Chlordane and Heptachlor Insecticides

ORDER THEM NOW FROM YOUR DISTRIBUTOR!



VELSICOL CHEMICAL CORPORATION

341 E. Ohio Street, Chicago, III. 60611

WRITE FOR THE VELSICOL TURF CHEMICALS CATALOG!



They're actually spraying a lawn!

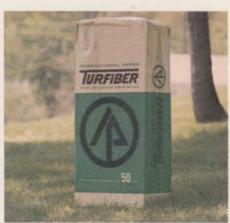
How? They're using International Paper <u>TURFIBER</u>, a new sprayable mulching discovery that mixes in water with fertilizer and grass seed. It cuts costs, resists erosion and promotes growth!



1. Turfiber being sprayed on 3:1 slope along New Jersey interstate highway project. Two days later, hurricane Donna dumped five inches of rain on the Turfiber treated area.



2. Here's the same slope several weeks later. Adjacent slopes seeded the same day by conventional straw method had a much poorer stand of grass and considerably more erosion.



3. Turfiber comes in 50-pound, moisture-resistant multiwalls you can store on the job without cover. Material cost of Turfiber is often less than hay-straw-asphalt combination.

Before you plant any more grass read why <u>Turfiber</u> has been such an amazing success in 4 years of use in 47 states

Contractors and their customers profit from the four Turfiber benefits: economy, efficiency, erosion control and growth.

TURFIBER is a wood cellulose mulch made from 100 percent virgin wood pulp. It looks and feels like raw cotton. It is free from any chemical additives and foreign matter which inhibit growth.

The key to Turfiber's success is that its tiny fibers separate and become suspended in water. It is easily sprayed in a slurry with water, fertilizer, and grass seed to form a fibrous mat over soil.

How Turfiber works

With Turfiber, you seed, fertilize



Demonstration shows how Turfiber separates and becomes suspended in water. After seed and fertilizer are mixed, Turfiber is easily added to form slurry.

and mulch in a single operation. Turfiber replaces the use of hay, straw, asphalt, mulch blowers and most of the manpower needed for conventional seeding operations.

A hydraulic seeder with a twoman crew can spray one-half an acre in about seven minutes—and cover up to twelve acres a day. Unlike hay or straw, Turfiber can be sprayed in high winds—and with a precision not possible with mulch blowers. Turfiber is colored green to assure uniform distribution.

How Turfiber resists erosion

Once on the ground, Turfiber becomes a fibrous mat. Embedded in this mat, grass seed and fertilizer are held in place.

Turfiber acts as a buffer. Water is absorbed quickly and allowed to percolate into the soil. The usual erosion problems from wind or rain are reduced.

Dangers of drought are reduced because Turfiber helps maintain a favorable moisture-temperature relationship between seed and soil. This relationship encourages early germination and growth.

Lands devastated by forest fires have been sprayed with Turfiber with dramatic results. It quickly established a grass cover for erosion control.

The problem of seed migration is reduced by the use of Turfiber. The Turfiber mat helps keep seeds from drifting to lower areas in the soil. You also get more even distribution of seed and fertilizer than with any other application method.

Where you can use Turfiber

You can use Turfiber anywhere you want to plant grass—including 1:1 slopes and other places where establishing grass is difficult.

Primary users of Turfiber have been contractors for highways, water and soil conservation projects, in-



This 12-acre research laboratory site near McLean, Va. was seeded with Turfiber in less than two days. Despite snow and cold weather, this plush stand of grass came up in less than a month.

dustrial and commercial parks, golf courses, and housing developments.

NOTE: Contractors and their customers report that Turfiber seeding can produce pure stands of grass equal to or better than the more costly methods.

Turfiber has been used in 47 states, Puerto Rico, and 8 foreign countries. A number of states and the U.S. Corps of Engineers Districts have written Turfiber into their specifications. So have the Soil Conservation Service, Federal Aviation Authority, Forest Service, National Capital Parks, among others.

Write for full details

If you would like to learn more about Turfiber, write International Paper, Special Products Department, Room 4, Drawer A, Mobile, Alabama 36601.

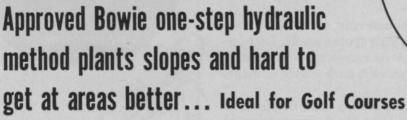
You will receive technical data, a current price list and information on recommended hydraulic seeding equipment and lawn care.



NTERNATIONAL PAPER

Now single operation seeds, fertilizes & mulches ½ acre in 8 minutes ... FASTER TURF!





Now you can plant large quantities of mixed slurries of various materials in record time . . . with up to 200 foot spray-distances . . . without clogging of pumps or lines . . . ONLY THE BOWIE HYDRO-MULCHER DOES IT! Proven for both sprigging and seeding with many mulching materials. The Bowie HYDRO-MULCHER is designed to handle all known wood cellulose fiber mulches. In addition to the time saving of applying seed or sprigs, fertilizer and mulch at the same time is the advantage of having moisture put out also to speed germination and growth. Write today for details.

The only HYDRO-MULCHER designed to handle all known wood cellulose fiber mulches.



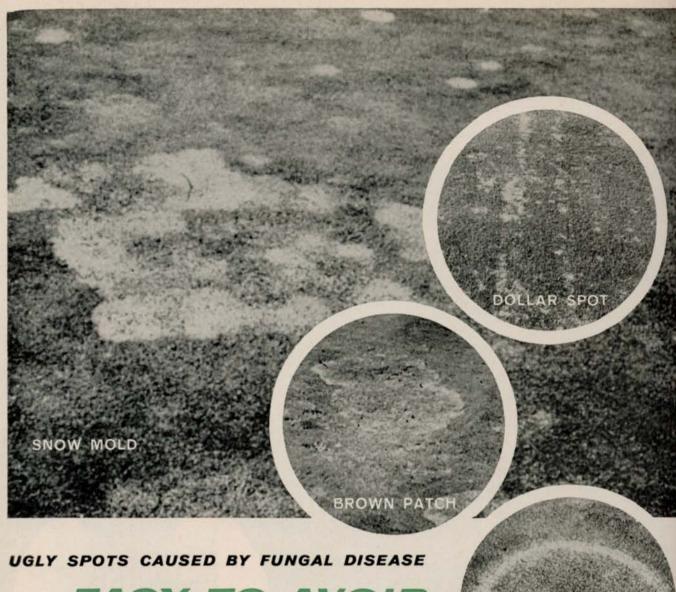
500 gallon Victor HYDRO-MULCHER trailer (1500 gallon Senior shown in main photo)

WRITE FOR NEW CATALOG

BOWIE HYDRO-MULCHER*

BOWIE MACHINE WORKS, INC. Box 630 • Bowie, Texas 76230

*C1964 Bowie Machine Works, Inc. • Patent and trade-mark registration applied for



EASY TO AVOID WITH THIS SPRAY

Fungal diseases such as you see here can ruin a beautiful lawn fast. First, ugly yellow, brown or grayish spots appear. Left unchecked, these diseases destroy vital root systems and spread, killing off large areas of lawn. To prevent such costly damage, simply apply Panogen Turf Fungicide.

This hard-working chemical makes it easy—and inexpensive—only .14 to 28c per 1000 ft. to spray away the danger of fungal disease. Can be used to keep healthy lawns disease-free, or to control an outbreak of fungal disease during early stages. Highly selective; attacks only fungal diseases without injury to turf. A liquid concentrate. Simply mix with water and apply with sprayer. Order from your chemical supplier.





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. . . or, worse still, is it just plain

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If so, you ought to have your own personal subscription, which will cost you only \$3 for 1 year or \$5 for 2, and which will contribute immeasurably to your peace of mind.

(It will also help you do a better job of turf management, weed and brush control, and tree maintenance.)

Mail us the coupon below right away, and include your check so we can start sending W&T posthaste!

WEEDS AND TURF

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WEEDS and TURF

September 1964

Volume 3, No. 9

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Controlling Japanese Beetles at Cleveland's Airport
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Contents of this Issue ® Trade Magazines, Inc., 1964



TURF HERBICIDES

FISONS MCPP SELECTIVE WEED KILLER A potassium salt formulation containing 2½ lbs. of MCPP per gallon. Made available through Fisons research in England. Developed especially for use on fine turf grasses where control of chickweed (common and mouseear), clover, and knotweed has heretofore been difficult to accomplish without injury to bent grasses, bluegrass, and fescues. Because of its safety features, it is slowacting; full effects from treatments are not visible for about three weeks.

Also available — **FISONS DSMA 100 AMA** for crabgrass control as well as **FISONS DSMA 100** for control of Dallis grass.

TURF FUNGICIDES



60% Mercurous Chloride, 30% Mercuric Chloride. Suspension type fungicide based on combination of mercury chlorides for positive long-lasting control of Large Brown Patch, Dollar Spot, Snow Mold.

75% Thiram

FISONS TURF-TOX Wettable powder 75% Thiram, a proven fungicide for the prevention and control of Brown Patch, Dollar Spot, Snow Mold, Fisons TURF-TOX may be safely mixed with mercury to your own specifications. Apply to prevent disease or to control it after it occurs.

Thiram with Mercury

FISONS TURF-TOX MC

One convenient wettable powder formulation that eliminates the need for on-the-spot mixing. Fisons TURF-TOX MC combines the widely used turf fungicides, Thiram, Mercurous Chloride and Mercuric Chloride, for the prevention and control of Dollar Spot, Brown Patch, Copper Spot, and Snow Mold.

Also available — FISONS 10% PHENYL MERCURY ACE-TATE. Effective for control of Bluegrass Blight, Curvularia Blight, Copper Spot, Dollar Spot, Pink Patch, Snow Mold.

TURF FERTILIZERS

FISONS XL TURF FERTILIZER 28-7-14

A concentrated water soluble fertilizer in the popular 4-1-2 ratio suitable for use on greens and fairways. XL Turf Fertilizer provides a Better control of growth, texture and color by going to work instantly, feeding through blades and roots.

Also available — XL LIQUID FERTILIZER, 15-10-5, and STOP-WILT, an emulsifiable vinyl compound in concentrated form for preventing moisture loss.

For further information and the name of your nearest distributor, write:



Poor Judgement

Not all tree service companies are big enough to possess every complex piece of equipment now available to help arborists do quicker, neater, cheaper jobs.

But arborists are businessmen as well as technical experts, and the principles of good business management simply must be followed. We learned recently, for example, that a tree company in a large midwestern city was seen transporting a load of newly trimmed branches right down the center lane of a major freeway during the rush hour.

This is obviously poor judgement from a public relations standpoint.

The truck, we were told, was so overloaded that it not only held up the single lane of traffic behind the truck itself, but interfered with cars attempting to pass on either side because drivers couldn't see around the obstacles of haphazardly stacked trimmings from city trees.

Of course, many excellent chippers are presently available which make it impossible for such an occurrence ever to take place; but a few companies just aren't in a position yet to buy such machines.

These small firms (and there's a definite place for them in our complex economy; most of our big firms started small themselves) must be doubly careful to exercise good public relations at all times, just as the big outfits do.

If a truckload of clippings is to be whisked away, for example, the truck should not use a busy traffic artery in the height of the rush hour. At least, the driver could take a route specially set aside for commercial vehicles. And those who load the truck in the first place should be vitally concerned that no branches or clippings overhang the truck's sides, posing an obstruction to driver vision, and physically blocking portions of the roadway.

No doubt companies which make such mistakes are few, but the action of the few, nevertheless, reflects on the many. The public judges all too rashly, and seldom stops to consider that because one tree company shows poor judgement, it is no reason to criticize the thousands who are outstanding examples of good management and public-spirited service.

Take a close look at your own practices. See anything which might be even slightly offensive? Every advance you help make for the industry will eventually become a personal advance for you!

WEEDS 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.



Spray this fall to control next year's weeds

Fall is the ideal time to spray with Simazine 80W herbicide for control of weeds through next summer.

You and your crews will be busy with 101 other jobs in the spring. So it's good management to get weed control taken care of ahead of time.

Effective weed control

It's good weed control, too. Whereever they're a problem—industrial, commercial, institutional or roadside sites—Simazine gives you the dependable, one-spray solution.

During the winter, Simazine stays in the weed root zone, ready to kill most annual and many perennial broadleaf and grassy weeds as they emerge.

Safe to use, too

And, because Simazine kills weeds through the roots before they have made any appreciable growth, you don't have any unsightly dead weeds to dispose of. No fire hazard, either.

Less soluble than other triazine herbicides, Simazine is safer to use where lateral leaching in the soil might cause injury to adjacent ornamental plantings or crops. And it's relatively nontoxic to humans and animals.

Note: in Southern areas, where winter rainfall is heavy, application should be delayed until late winter or early spring.

For full details on highly effective weed control with one spray of Simazine this fall, write to:

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





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Applicator's
Manual of
AQUATIC
Weed Control

The Last Word In Aquatic Weed Control

Weeds and Turf's widely hailed series of articles on aquatic weed control covers species identification, chemicals for control, methods and equipment for application. Now available in a single 16-page, illustrated reprint for handy reference!

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Send me copies of your aquatic reprint at \$ each. My check for is enclosed.
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Interested in Suppliers Guide

We enjoy your *Weeds and Turf* publication as it is an extremely informative publication. You do an excellent job in presenting scientific information.

In a recent issue you included a Chemical Suppliers Guide. Since we supply many of the products that were listed in the guide, could you advise us on the procedure you use for selecting and including the names of suppliers?

J. A. Simmons

Research Division O. M. Scott & Sons Co. 160 Main Street Marysville, Ohio

Questionnaires are mailed each year to companies which supply chemicals for weed control, turf maintenance, and tree care. This year's directory, which will appear in the December issue, will also include equipment. Ed.

Parkman Likes WT

Weeds and Turf is a very excellent publication and receives cover-to-cover attention in my office every month. You and your organization are to be congratulated on the preparation and publication of such a worth-while magazine.

James W. Smith

Field Landscape Architect Kensington Metropolitan Park 2240 West Buno Rd. Milford, Mich.

WSA Appreciates Coverage

I want to take this opportunity to express our deep appreciation for the fine journalistic coverage you gave the February meeting of the Weed Society of America (WSA) in your March 1964 issue of *Weeds and Turf*. The excellent coverage you gave to our meeting will enhance the image of weed science in this country and abroad.

The generous amount of space you allotted to the coverage of our meeting in your March issue is commendable. We certainly hope you will plan to cover other major events in weed science and especially future meetings of WSA.

We also congratulate the editorial staff of *Weeds and Turf* on their decision to publish this timely periodical as a separate journal.

Dr. W. C. Shaw

Past President, WSA Crops Research Division Agricultural Research Service U. S. Dept. of Agriculture Beltsville, Md.

Needs Illustrated Weed Book

I enjoyed the April issue of Weeds and Turf very much. The magazine is very interesting and I find a lot of valuable information in it. I have been in the spraying business for eight years.

Would you know of a dictionary of weeds with pictures of each weed in color? This would help my men to recognize various weeds for study.

Gene Keyawa

Gene's Commercial Spraying Chico, Calif. 95926

If any readers know of a book that would meet the requirements in the above letter, we're certain that this information would be well received by Mr. Keyawa as well as other interested applicators.—Ed.

Problem With Pond

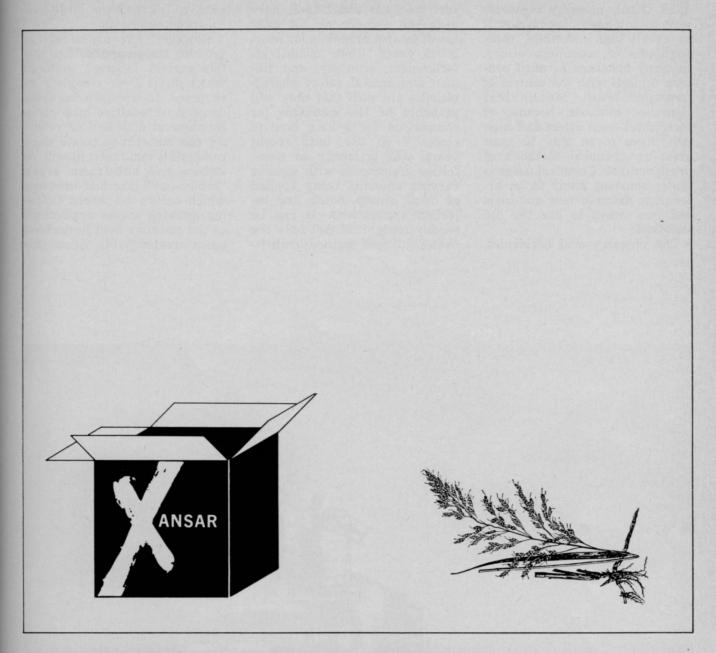
We have a 1½-acre pond with an average depth of 30 inches. Water source is from a creek, and water from the pond is used to irrigate tees, greens, and fairways. Our problem is keeping the water clean. We would appreciate any information on control of algae and underwater weeds.

William Goulet

Rochester, N. Y.

We recommend our "Applicator's Manual of Aquatic Weed Control," which will give you the information you seek to cure your pond problems.—Ed.

Weeds and Turf welcomes expressions of opinions from its readers. Send ideas and comments briefly as possible to Charles D. Webb, Editor, Weeds and Turf, 1900 Euclid Ave., Cleveland 15, Ohio.



This year there are fewer weeds because of "Ansar"

PROGRESS REPORT: ● In the brief span of two years "Ansar" herbicides have compiled a remarkable record in the eradication of weeds—especially Johnson Grass—in cotton and non-crop areas. ● Cotton growers have kept our plants working at top capacity night and day to meet the demand . . . and as a result we'll shortly start construction of a new multi-million pound capacity "Ansar" plant!

• A new product, "Ansar 529" (170 with a surfactant added) will simplify mixing—make the product far easier to use. ● Other "Ansar" products for control of weeds in irrigation ditches, orchards and a variety of non-crop areas will be available very soon. Today "Ansar" is the first name in herbicides . . . a product of

THE ANSUL COMPANY, MARINETTE, WIS.



HE GOAL of every rights-ofway maintenance supervisor is to create and maintain thoroughfares of maximum utility. In many instances he must concern himself with the control of unwanted brush. Mechanical clearance methods, because of their short-term effect and high cost, have given way in most areas to chemical methods of brush control. Chemical usage is under constant study in an attempt to discover new materials and new ways to use the old standards.

The phenoxy acid herbicides,

such as 2,4-D and 2,4,5-T, have been the cornerstone for most brush control programs for nearly 15 years. Their overall effectiveness, economy, and human and animal safety characteristics are such that they will probably be the standards for comparison for a long time to come. Their use, until recent years, was primarily as stemfoliage treatments with smaller varying amounts being applied as basal, stump, notch, and injection applications. It can be readily recognized that only the first-mentioned method lends it-

self to extensive large-scale broadcast applications.

However, the stem-foliage growing season applications contain certain inherent problems which limit their complete acceptance. In crop-growing areas, damage to sensitive crop plants by physical drift and/or volatility can sometimes create many complaints and much ill will. In urban and suburban areas, "brown-out" (the leaf browning which occurs 2-3 weeks following growing season applications of the phenoxy acid herbicides) again creates public dissatisfac-

