

**When a company puts its
name on a product...
you know it will give good service
and stand behind the results.**

What better reason to buy Nitroform[®] nitrogen in your supplier's own bag? You get a smart organic nitrogen buy plus the service that comes when a supplier sells his own product.

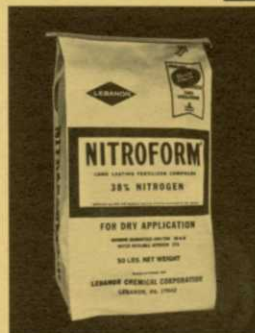
In the Hercules bag or in your supplier's bag, Nitroform is the same high-quality product. Produced under stringent manufacturing conditions, Nitroform guarantees 38% organic nitrogen and assures predictable performance. It's long-lasting, non-leaching, non-dusting and odorless.

**NITROFORM[®]
IS A GREAT BUY IN ANYBODY'S BAG.**

Take a look to see if your supplier's bag is on the next page 

There's only one **BLUE CHIP**[®] fertilizer,

and it can come in any one of these bags.



TRY



HERCULES[®] POWDER BLUE[™]

ORGANIC NITROGEN FOR SPRAY APPLICATION.

TURF AND HORTICULTURAL PRODUCTS
SYNTHETICS DEPARTMENT, HERCULES INCORPORATED
WILMINGTON, DELAWARE 19899





Dead Elms In Michigan.

DUTCH ELM DISEASE

One Step Closer To A Cure

DISCLOSURE in mid-January by Secretary of Agriculture Earl L. Butz of a research breakthrough in the control of vascular wilt diseases of trees has brought scientists closer to finding a cure for Dutch Elm Disease.

The disease that for more than 40 years has plagued the stately giants of America's historic past is now being conquered. The chance for complete eradication is still far off, but organizations, concerned citizens and scientists are now working with renewed interest to combat this disease that annually takes many thousands of elm trees in its toll.

The breakthrough described by Secretary Butz is a technique of making an essentially insoluble

EDITOR'S NOTE:

The Environmental Protection Agency has just Federally registered Benlate benomyl fungicide as an aid in the control of Dutch Elm Disease. The Du Pont Company, manufacturers of the product, said Benlate is recommended for use on elm trees as a foliar spray or trunk injection treatment.

Du Pont cautions that the label says that Benlate is to be used by trained arborists in conjunction with sanitation and insect control programs. Consult with local and state authorities for additional information concerning the use of Benlate.

chemical soluble and rapidly injecting it directly into the elm tree, rather than through the soil. The chemical—benomyl—has been under intensive investigation by plant pathologists at the USDA Plant Science Research Division's Shade Tree and Ornamental Plants Laboratory at Delaware, Ohio. The situation confronting these scientists initially was that while benomyl fungicide exhibited local systemic properties, i.e. xylem movement from the point of entry upward to twigs and leaf tips, not enough of the chemical could be economically applied in other than a laboratory situation to effectively combat Dutch Elm Disease. Now with the

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Ag-Organics Department, Midland, Michigan 48640

Dursban insecticide. Bugs have another name for it.

They call it "The Unsurvivable One!" Because nothing wipes out chinch bugs, sod webworms and many other serious turf pests like DURSBAN* insecticide. And DURSBAN insecticide won't leach. It has excellent residual activity. It's safe, too, for all common turf grasses. And economical—you get more bugs for your buck, because so little goes a long long way. Ask your Dow distributor or your contract applicator for "The Unsurvivable One!"

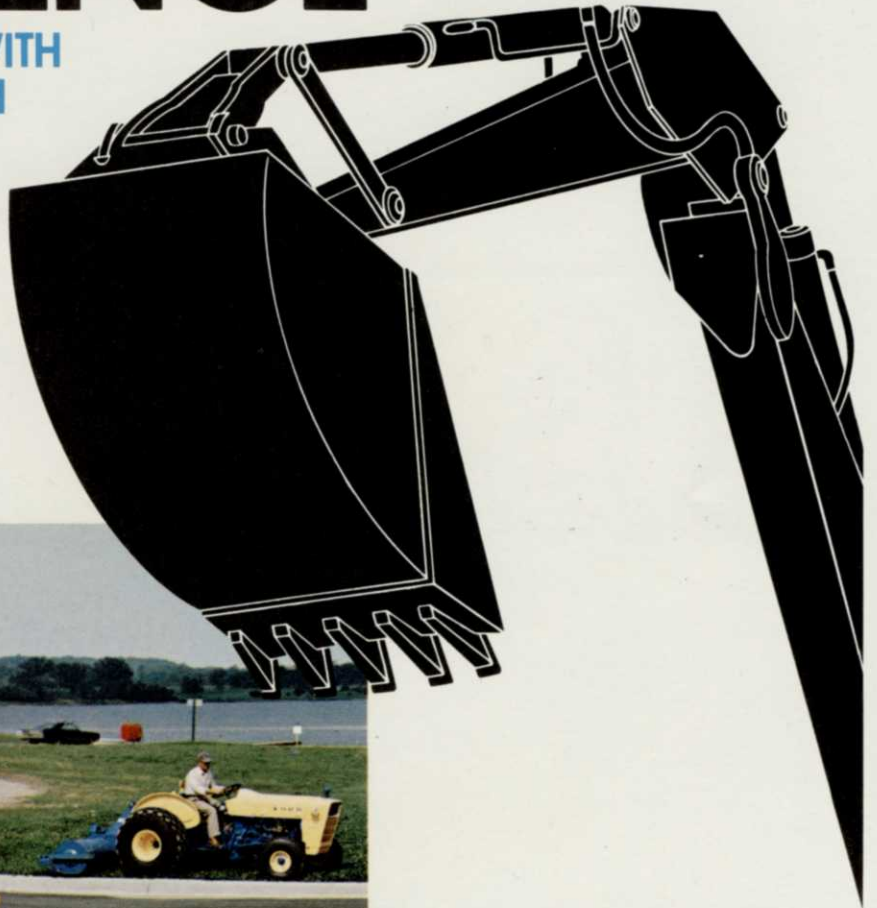
*Trademark of The Dow Chemical Company



DOW CHEMICAL U.S.A.

THE FORD DIFFERENCE

PRECISION DIGGING WITH THE POWER OF AN ARM INSTEAD OF A WRIST.



Many backhoes dig only with the curl of the bucket. They scoop instead of dig.

Ford is different. A Ford backhoe *pushes* the bucket through dirt. That's because boom and crowd cylinders are mounted *in-line*. So the full power of both cylinders can be applied at

once. You get the muscle of the entire backhoe digging in a strong, *arm-like* motion.

A Ford backhoe also has super-sensitive hydraulics and easy-acting controls. The result is *precision* bucket action in areas where you can't afford to tear up surrounding turf.

Your Ford tractor dealer will show you some other Ford backhoe differences. Like box-beam construction, arched boom design and a new line of Ford backhoe buckets!

NUMBER ONE ON WHEELS
FORD TRACTOR

Your Ford industrial tractor and equipment dealer is listed in the Yellow Pages under "Tractors" or "Construction-Equipment." See him for information on how to buy, lease, rent or finance.



For More Details Circle (139) on Reply Card

◆ For More Details on Preceding Page Circle (135) on Reply Card



TOTAL TURF CARE IS HERE!

Dacthal®

Start your Total Turf Care this year with Dacthal W-75 herbicide. Or use the convenient 5 percent granular form if you like.

Dacthal gets the jump on most annual grasses and broadleaf weeds. This preemergence herbicide prevents weeds as they germinate. Crabgrass and *Poa annua* don't have a chance. Yet, Dacthal is a truly selective herbicide that will not affect established grass. It's even safe for new grass when used according to label directions.

Just one application in early spring will control weeds for a full season. In the case of *Poa annua*, another application in late summer keeps this late germinating pest out of sight.

Don't worry about residue build-up either. Dacthal degrades in one season; it's not persistent in the soil.

Dacamine®

For those areas where broadleaf weeds are a problem, use Dacamine Turf herbicide to sustain your Total Turf Care. Postemergent Dacamine kills dandelion, plantain, poison ivy and most other broadleaf weeds.

Get a full course of protection against weeds and disease.

Dacamine is a special form of 2,4-D, non-volatile, yet very effective. It combines the weed-killing power of an ester with the safety of an amine. So Dacamine stays put - kills the weeds you spray it on but won't vaporize and damage valuable plants nearby.

Dacamine is an oil soluble concentrate. This allows it to penetrate waxy leaves and move all the way to the roots - killing the whole plant.

Daconil 2787®

Total Turf Care includes broad-spectrum disease control. Daconil 2787 is the one fungicide that solves most disease problems. Why use a group of fungicides to do what Daconil 2787 can do by itself?

Use Daconil 2787 to prevent or cure Brown Patch, Copper Spot, Dollar Spot, Leaf Spot, Melting Out, Pink Snow Mold (in Washington and

Oregon only) and more. Many leading golf courses use Daconil 2787 in their disease prevention program.

Daconil 2787 has performed well on over 25 grass species and varieties. Excellent turf tolerance allows you to use it even in hot, humid weather.

Just mix Daconil 2787 with water and spray. You don't need a surfactant. It's compatible with many commonly-used pesticides. Follow label directions for exact usage.

Daconate®

Round out your Total Turf Care with Daconate postemergence herbicide. Get those escape weeds that slipped by your preemerge. Daconate will effectively control crabgrass, chickweed, wood sorrel and other hard-to-kill weeds. It's economical, too.

Daconate is a ready-to-use arsonate liquid, pre-mixed with the right amount of surfactant for maximum coverage and control. Since it is an organic arsenic compound, it does not have the more toxic properties of inorganic arsenic compounds, such as calcium or lead arsenate. For best results, spray Daconate during warm weather when weeds are actively growing.

FREE!

Get this Total Turf Care dial to help you solve many turf problems. Just a twist of the wrist helps you identify a problem and select a treatment. Send the coupon today for your Total Turf Care dial. Always remember to follow the label directions when using any chemical.



Be Diamond Sure!

Agricultural Chemicals Division
Diamond Shamrock Chemical Company
300 Union Commerce Building
Cleveland, Ohio 44115

Gentlemen: Please send me _____
Total Turf Care dials.

Name _____

Position _____

Street or PO Box _____

City _____ State _____ Zip _____



**Diamond Shamrock
Chemical Company**

A UNIT OF DIAMOND SHAMROCK CORPORATION

Accutrol—Industry Unites Chemicals And Air

HARNESS air to apply chemicals! That's the latest way to spray chemicals for brush control.

Sound incredible? Velsicol Chemical Corporation doesn't think so. They've developed a new concept in spray application that is winning much attention from applicators across the country.

Called Accutrol, the new system:

1. minimizes drift and environ-

mental problems.

2. reduces the number of times required for refilling spray tanks.

3. increases the efficiency of the chemical being sprayed.

Accutrol basically consists of two parts, a special nozzle and spray adjuvant. The nozzle produces large droplets of air emulsion which have little or no tendency to float in the air.

Large droplets ordinarily would not provide good coverage because there would be too much space between the droplets, but the spray adjuvant compensates for this by causing the droplets to spread over the surface of the plant, thereby increasing the area of contact. The adjuvant also reduces spray run-off by causing the chemical to stick to the target plant and to penetrate through the waxy surface of the plant.

The nozzle and adjuvant create a spray mix resembling foam, although Velsicol is careful to point out that it isn't really foam. It's a mixture of air and water and is called an "air emulsion".

"The difference between air emulsion and foam, as most people think of it, is that foam is thick and heavy and does not readily break apart," says Phil Nathan, product manager for Accutrol. "A heavy type of foam that does not readily flow would not be appropriate for brush control because coverage would not be thorough. Accutrol flows readily and rather resembles the froth on top of milk rather than the thick, heavy type of foam that comes out of a shaving cream can."

Drift control is only one advantage of Accutrol. The white spray is highly visible against green vegetation. The applicator can see the volume of the spray and see where the spray is falling and make necessary adjustments, thereby minimizing skips and reducing excessive spray usage.

Savings in time is another major advantage. Only one spray tank is needed. With Accutrol the number of times required to refill spray tanks is reduced. Less water is required be-

(continued on page 53)



This applicator accomplishes a precision spray job with minimum drift. A variety of spray patterns are available with the Accutrol handguns.

Your first step to healthier turf



1 Spring is the time to take it

Leaf Spot problems caused by overwintering spores of *Helminthosporium* spp. can spoil the health and beauty of your turf this spring. So can Rust and *Rhizoctonia*.

But if you apply TERSAN[®] LSR now, you can break the *Helminthosporium* spp. cycle before it becomes a costly problem. You stop Leaf Spot before the "melting" or "fading" out stage. And Rust and *Rhizoctonia* don't get a chance to damage your turf.

The application of TERSAN LSR to tees, greens and fairways in the spring is the first step in the Du Pont TERSAN 1-2-3 Disease Control Program. The program that prevents or controls all major turf diseases on all common grasses throughout the entire year.

The TERSAN 1-2-3 Disease Control Program is effective, economical and entirely non-mercurial. It has been proven by hundreds of professional turf men throughout the country.

For complete details on the program and a supply of TERSAN fungicides, see or call your golf course supplier today.

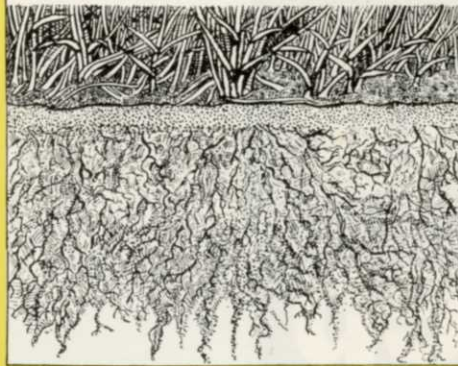
With any chemical, follow labeling instructions and warnings carefully.

DU PONT TURF PRODUCTS
REG. U.S. PAT. OFF.

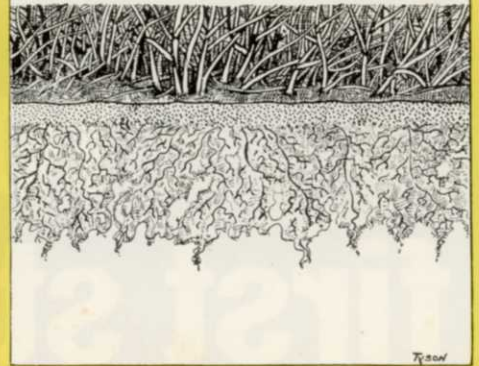


COMPARE ROOT SYSTEMS...

Fed with NUTRICULTURE formula



Fed with ordinary fertilizer



**PLANT
MARVEL**[®]
BRAND

START PLAY 2 WEEKS EARLIER!

S-T-R-E-T-C-H YOUR SEASON

Begin when ground temperature passes 50°

2-WAY FEEDING CREATES SUPERIOR TURF IN 3 DAYS

Send for FREE sample of Bent Special (28-8-18) plant food. Then, feed-as-you-water a 50-square foot test area in your nursery or practice green. See the test plot respond vigorously to 2-way turf and root feeding in just 3 days.

... by applying
NUTRICULTURE
"Bent Special" Formula
(28-8-18)



NEW FREE BROCHURE

The instantly-available nutrients of NUTRICULTURE* formulas assure quick-start growth of turfgrass earlier in the Spring. Growth response need not wait for soil temperature to warm up to the 70° that dry fertilizers need. Quick absorption of the life-giving NUTRICULTURE elements by both grass blades and roots produce instant greening of turf... and make for earlier play on livelier-looking, beautiful greens. You'll want to use NUTRICULTURE formula "Bent Special" (28-8-18) on your turf all season long.

Ask your distributor for free NUTRICULTURE formula sample and helpful Golf Superintendent brochure.

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ART EDWARDS
EDITORIAL DIRECTOR

COMPLIMENTARY SUBSCRIPTION QUALIFICATION CARD

4/72

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YES NO

A. Please check below the one item which best describes your primary type of business:

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| (2) <input type="checkbox"/> Tree Service Companies | (14) <input type="checkbox"/> Hospitals, Schools, Colleges, Race Tracks, Shopping Centers |
| (3) <input type="checkbox"/> Aerial Applicators | (15) <input type="checkbox"/> Cemeteries |
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| (9) <input type="checkbox"/> Parks & Grounds Superintendents, (federal, state, municipal) | (21) <input type="checkbox"/> Institutional Research and Teaching |
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| (11) <input type="checkbox"/> Turf Specialists (Includes Seed Growers) | |
| (12) <input type="checkbox"/> Armed Forces Installations | |

- (23) Retailers or Wholesalers of Chemicals Used in Vegetation Maintenance

- (24) Libraries
(25) Regulatory Agencies, Associations

B. Your Title

C. Date

D. Your Signature

Please fill in those items below

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