

LETTERS TO THE EDITOR

WE ARE CONGRATULATED

The members of the Maryland Turfgrass Association have asked me to thank you for the publicity given our association . . . in the January 1972 issue WEEDS TREES AND TURF. Our organization is seven years old now and we are growing at a rapid rate. We certainly do appreciate the publicity given to our organization by your excellent magazine. JOHN R. HALL, Secretary, Maryland Turfgrass Association.

PERMISSION GRANTED

We would like to adapt and condense the article, "Sulfur for Turfgrass," by Dr. Fred Grau, which appeared in the February, 1972 issue of your magazine.

Incidentally, you put together an excellent journal.

We will head our version this way: Condensed and edited from WEEDS TREES and TURF magazine . . . Santford Martin, Editor, Potash Institute of North America, Atlanta, Ga.

WE ARE COMPLIMENTED

I want to take time and thank each . . . of you that has a part in

the WEEDS TREES and TURF magazine . . . I am one of the grateful one's who receive this magazine and I hope you all the best of luck . . . and keep up the good work. Kenneth Courtney Sr., Great Falls, Montana.

A READER WRITES

I want to thank you for helping to make our second Grounds Maintenance Conference a success. We had 300 professionals attend this conference and it was a huge success; in fact a television station did a show on it.

. . . I receive your excellent magazine at my office . . . I like to keep back issues for reference purposes. . . Ted W. Stamen, extension agent — home horticulture, New Haven County Extension Service, Wallingford, Conn.

TOO MANY WEEDS

. . . I wish there were more in your magazine about plant and tree diseases instead of so much about weeds — you might reach three times as many people if there were. Jim McNally, San Francisco, Calif.

TIME TO RENEW: Your Renewal Card Is Bound In Above

We need your okay to continue sending you WEEDS TREES and TURF magazine on a free basis. In fact, we must have it.

We—and other publishers—have been somewhat remiss in the past in that we've sent your copy of the magazine whether or not you sent your card in. This can no longer be done.

As you know, subscriptions are free to bonafide members of the industry. You qualify. But economics has again reared its head and we must stabilize our circle of readers. We shall maintain the magazine circulation at 33,000—the number which constitutes the basis for our advertising rate. No additional magazines will be sent except at the published rate of \$10 per year in the U. S. and Canada.

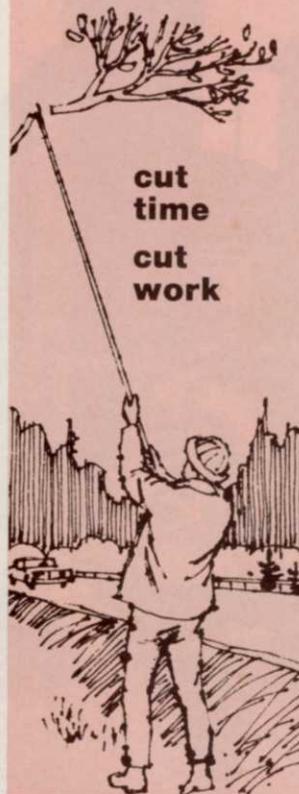
MAY WE HEAR FROM YOU—by way of the bound in card above? Simply tear it out—SIGN and check your answers. DO NOT LOSE YOUR FREE SUBSCRIPTION TO SOMEONE ELSE. We want your continued support and we need you on our list.

Thank you.

Art Edwards, Editorial Director

(This renewal notice is a requirement of our national auditing service to verify that you are a member of the industry and that you wish to receive the magazine).

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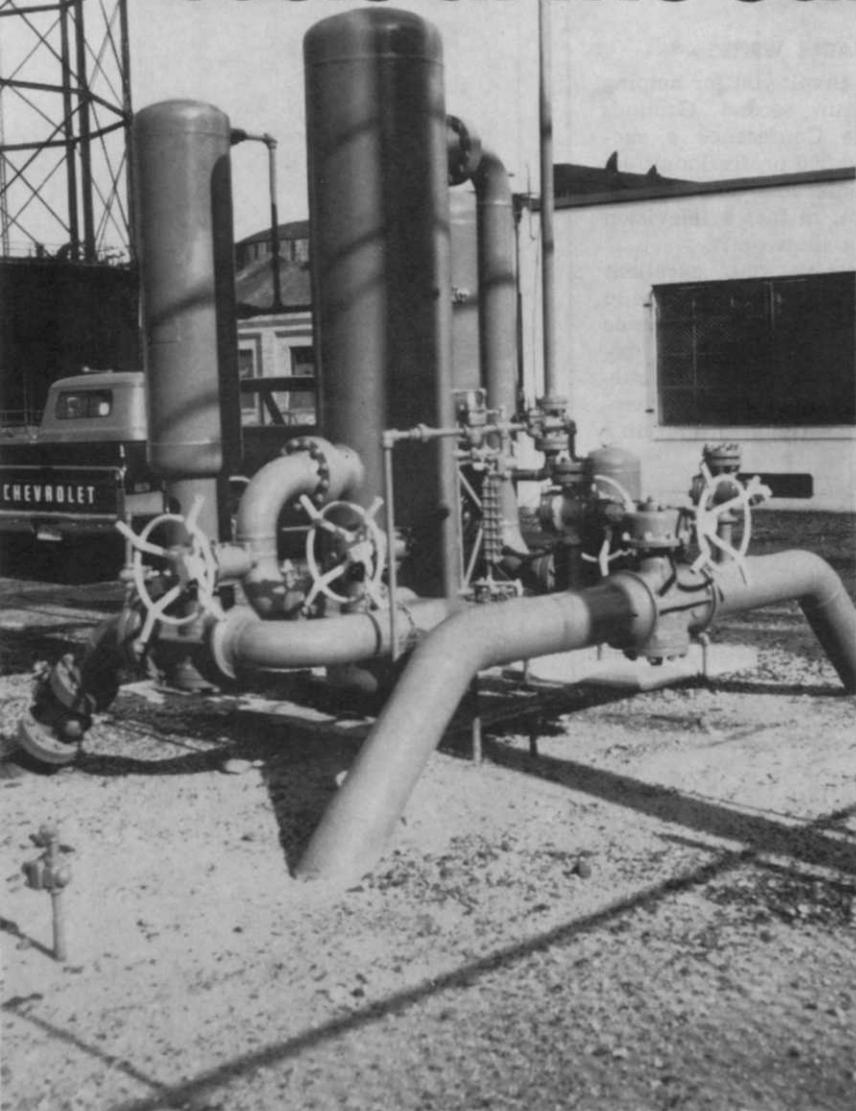
For more information/literature, call Harold DePue, Sales Manager, (503) 659-5660. Or write:

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For More Details Circle (136) on Reply Card

How to control weeds and costs at the same time.



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Weeds are expensive.

They are everything from a fire hazard to a haven for unfriendly rodents.

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More than 40,000 square feet of exhibit space was utilized at the 43rd International Turfgrass Show. Attendance was 4,053, up a total of 568 over last year's Denver meeting.

43rd International Turfgrass Conference and Show

EXPO – COMMERCIAL TURFGRASS

Golf course superintendents continued their tradition for the greatest show on turf," a theme adopted last year and again appropos at Cincinnati in 1972.

Meeting in the Cincy Convention-Exposition Center, February 13-18, they hosted more than 4000 members and guests for a new record and sold 170 more exhibit booths than ever before, utilizing 40,000 square feet of space. Equipment for this market was on hand, in most any make or model. And the busiest people at the show, aside from the host delegation, were exhibitors who manned booths.

Biggest conference drawing card—and a feather-in-the-hat for the program committee—was the appearance of Washington, D. C.'s Ralph Nadar. He played his ecology line for an overflow crowd complete with speakers to carry the message to a lobby crowd too large to gain entrance to the main hall. A safe assumption may well be that Nadar

failed to excite this crowd with his stereotyped presentation, little of which was new, and all of which was



Keynote speaker Ralph Nadar, Washington, D.C.

read with little noticeable enthusiasm.

However, Nadar was followed by almost 50 leaders in the business of commercial turfgrass and its various segments. The '72 conference was loaded with both practical and technical information for the working golf course superintendent.

New president for the coming year is Robert V. Mitchess who becomes 36th president of the Golf Course Superintendents Association of America (GCSAA). He is superintendent at the Portage Country Club at Akron, Ohio. Prior to this position which he accepted last year, he spent 13 years as superintendent at the Sunset Country Club, St. Louis, Mo. He succeeds outgoing president, Richard C. Blake, superintendent at Mount Pleasant Country Club, Boylston, Mass.

Mitchell in taking office pointed to the big strides made recently by the

(continued on next page)

Table 1. Conference attendance continues high for the national turf conference staged by the GCSAA. Statistics for the past five years are as follows:

	Cincinnati Ohio (1972)	Denver, Colorado (1971)	Houston, Texas (1970)	Miami Beach, Florida (1969)	San Francisco, California (1968)
Members	1309	1076	1182	1078	902
Ladies	455	564	592	620	610
Guests	226	234	189	194	192
Greens Chairmen	250	214	211	506	90
One Day Admission	609	333	419	285	286
Turf Students	219	142	52	57	13
Exhibitors	985	922	975	771	730
Total Registration	4053	3485	3620	3511	2823

GCSAA which consists of a superintendent certification program, a pesticide information dissemination program, and an association management seminar program which will be initiated this year.

Mitchell stated that he believes the association will continue to grow in both numbers and activities. He points to plans for moderizing operations to cope with the expected growth. Membership records are already being processed with newly installed electronic data processing. A new administrator will be hired this year, he pointed out, to replace Ben Chelvin who resigned as executive-secretary early this year.

Special recognition was given 44 superintendents who were the first

to complete requirements and achieve eligibility for the title of Certified Golf Course Superintendent. More than 30 of the 44 were on hand for the Conference. Primary requirements include membership in the association plus a tenure as a Class A member for three years. A comprehensive testing program is also mandatory.

Typical of conference discussions was that by Dr. Elwyn E. Deal, University of Maryland, College Park, Md. He stressed the impact of legislative decisions on plant protectants and how they relate to golf course management.

Deal pointed out that the subject of pesticides is so complex that it behooves all in the commercial turf-



Dr. Elwyn E. Deal, Cooperative Extension Service, University of Maryland, College Park.

grass industry to be as well informed as possible. He urged the group to take every opportunity to read, listen, think and discuss this subject. The 60,000 pesticide products now registered for us in the U.S. are made from one or more of some 900 chemical compounds, he said. About half of the products registered by the Environmental Protection Agency are for nonagricultural uses such as around homes, apartment buildings, and industrial plants. The greatest volume however, he said, are for farm uses, including golf course turfgrass. Value of pesticides sold in 1970, Deal said, amounted to \$870 million. Total use was slightly more than one billion pounds.

Deal believes that the next few months and years will be crucial in determining the future direction of the use and availability of pesticides in this country. Thus, he urged superintendents to take active steps in making their needs for pesticides known.

The association announced that Boston, Mass. has been selected as the site for the 44th International Turfgrass Conference and Show. Dates will be January 7-12, 1973 and the Statler Hilton Hotel will serve as the association's headquarters.

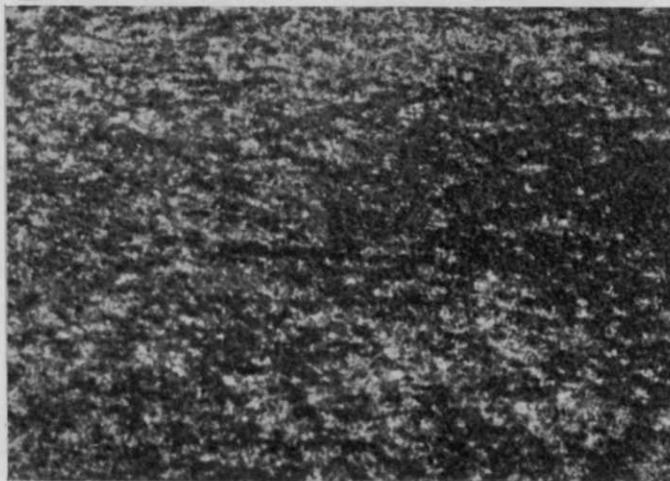
"The Conference this year has been the best ever both in terms of our meaningful educational program and the broad and extensive display of equipment and products at our show. We expect the Conference and attendance in Boston to even exceed the response in Cincinnati." So said newly elected GCSAA president Mitchell.

The association has a 3,000 worldwide membership with headquarters at Des Plaines, Ill.



GCSAA Officers and Directors for 1972: l. to r. (front row), Richard C. Blake, Boylston, Mass., president emeritus; Clifford Wagoner, Modesto, Calif.; Robert V. Mitchell, president, Akron, Ohio; Paul Mechling, Sylvania, Ohio, director; (back row), T. W. Woehrle, Birmingham, Mich., director; Palmer Maples Jr., Atlanta, Ga., director; Richard W. Malpass, Portland, Ore., director; Carleton E. Gipson, Conroe, Tex., director; and Charles G. Baskin, Waterbury, Conn., secretary-treasurer.

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Since MERTECT 140-F is systemic, you also get away with fewer applications per season, thanks to its residual disease control. And it has a lower dosage rate than other fungicides, so you save there, too.

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For More Details Circle (143) on Reply Card

WINTER-HARDY ORNAMENTALS

The Key Is Year-Round Fertility



Two-year-old white spruce seedlings are checked by Dr. Robert J. Schramm, Jr. at Pachaug State Forest Nursery, Voluntown, Conn. More budding and branching was found in plots under year-round fertility tests.

THERE'S a new outlook for ornamentals and forward-looking nurserymen through a new concept for producing nursery stock, says Dr. Robert J. Schramm, Jr., extension nurseryman and associate professor of ornamental horticulture at the University of Connecticut in Storrs, Connecticut.

Through this new concept called "Year-Round Fertility", Dr. Schramm reports that many nurseries have the potential for improving plant growth and quality of stock over a shorter period of time. With some species, three years of normal growth can be realized in just two seasons. An added benefit is an improvement in winter hardiness. It all adds up to increased opportunities for nursery profits.

Basically, the concept calls for 1) building up all plant nutrients in the soil to "optimum" levels based on soil analyses (these levels are below the toxic level, but high enough to overcome the "Law of the Minimum"); and 2) maintaining nutrients at these levels through regular soil sampling and periodic application of the required nutrients, especially nitrogen, phosphorus, and potassium. With this approach, no essential nutrient is believed to function under the "Law of the Minimum".

In essence, the idea for Year-Round Fertility has been taking shape for some time. Three years of research in Connecticut have established the benefits in the Northeast and have also confirmed earlier studies by Dr. Schramm in North Carolina. In this earlier work on azaleas and rhododendrons it was found that under a year-round program more flowers were produced per plant and also these flowers opened sooner in the spring and stayed open longer with better color than when plants were grown under a conventional fertilizer program. With a conventional program, fertilizer is applied only during the active growing period (May through August).

In Connecticut, many of the traditional ideas and recommendations for growing nursery stock were based on practices used by tobacco and potato farmers. Frequently, the nurseryman simply applied whatever fertilizer the local dealer had on hand. And so crop recommendations, passed from father to son, became the accepted way to fertilize nursery stock.

Dr. Schramm has now initiated a new approach. He has been working to help nurserymen and others grow marketable, high quality plants in the shortest period of time to realize

maximum profits. Workers in many other states have also been looking at ways to push stock for maximum production, but results in many instances involved injury to plants. Fertilizer burn or freeze damage often stemmed from improper timing and improper rates of fertilizer.

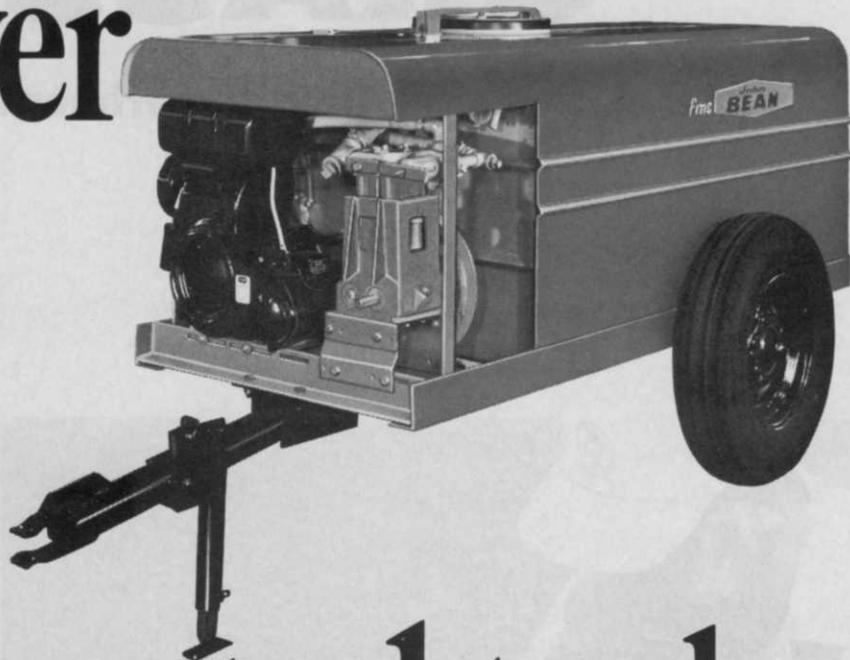
Early in Dr. Schramm's studies came a decision to look at the complete analysis of the soil in which a plant would be grown. The first question he felt a nurseryman should answer is, "What does the soil test show?" Without knowing the nature of the soil, it is impossible to treat and fertilize growing stock properly. Here is where the "Law of the Minimum" comes into play. Soil analysis may show prescribed levels of nearly all elements essential for proper growth but a low level of just one element will prevent the plant from reaching its maximum potential. It's like the old adage — a chain is no stronger than its weakest link. A complete soil analysis will usually tell you what is lacking.

The value of fall fertilization has recently been demonstrated by Dr. Harold B. Tukey, Jr., of Cornell University. He found that when the tops of plants become dormant in the late fall or early winter, the roots

(continued on page 42)

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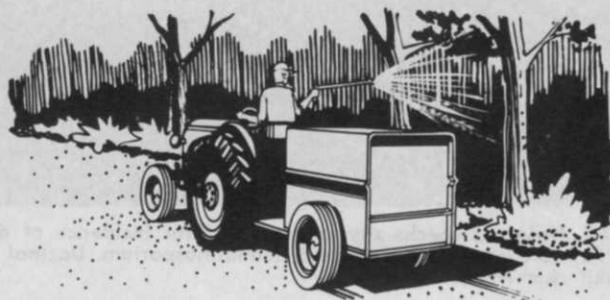
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For More Details Circle (132) on Reply Card

ZOYSIA GRASS

Mel Anderson's Bold Experiment



Mel Anderson checks zoysia grass turf for incidence of disease. He uses Daconil 2787 to control dollarspot and Helminthosporium. Dacthal W-75 controls crabgrass and chickweed.

FIVE years ago, when Mel Anderson set out to build a golf course from scratch in Lawrence, Kansas, he took a gamble. He would put the entire 18 holes in Zoysia Grass. As part owner, as well as course manager, he had more than his job at stake.

His gamble is paying off. Alvarmar Hills Golf Course, a public course, is attracting golfers from miles away. The players like the zoysia turf. It gives the balls a good lie during long, dry spells and even in the winter months when a good deal of golf is played in Kansas.

Mel Anderson knew quite a bit about zoysia before he started Alvarmar. While working under Charlie Sidenstucker at the St. Joseph Country Club in St. Joseph, Missouri, he helped install zoysia nurseries and worked with zoysia on tees. Anderson also had considerable experience while managing the Lawrence Country Club prior to assuming the responsibility of building Alvarmar Hills. During these years he felt zoysia could be grown by stolonization, and it has proved very successful.

He liked its drought and weed-resistant qualities. He knew that it had taken intense punishment from the heavy traffic on tees and playgrounds. It spread rapidly and was winter hardy.

Anderson had the common problems of converting new land into a golf course. The 180 acres he had to work with included farm land, scattered trees and some timber. After clearing the timber where needed to make an interesting course, he turned the soil. The soil type in the area included a layer of gumbo lying over limestone rock.

Once the soil was worked, he soil-tested to determine what should be added. The elements included lime, potash and some trace minerals. He applied two pounds of nitrogen per 1,000 square feet every 10 to 14 days at the start. And now that the turf is established, he continues to apply about one pound per year.

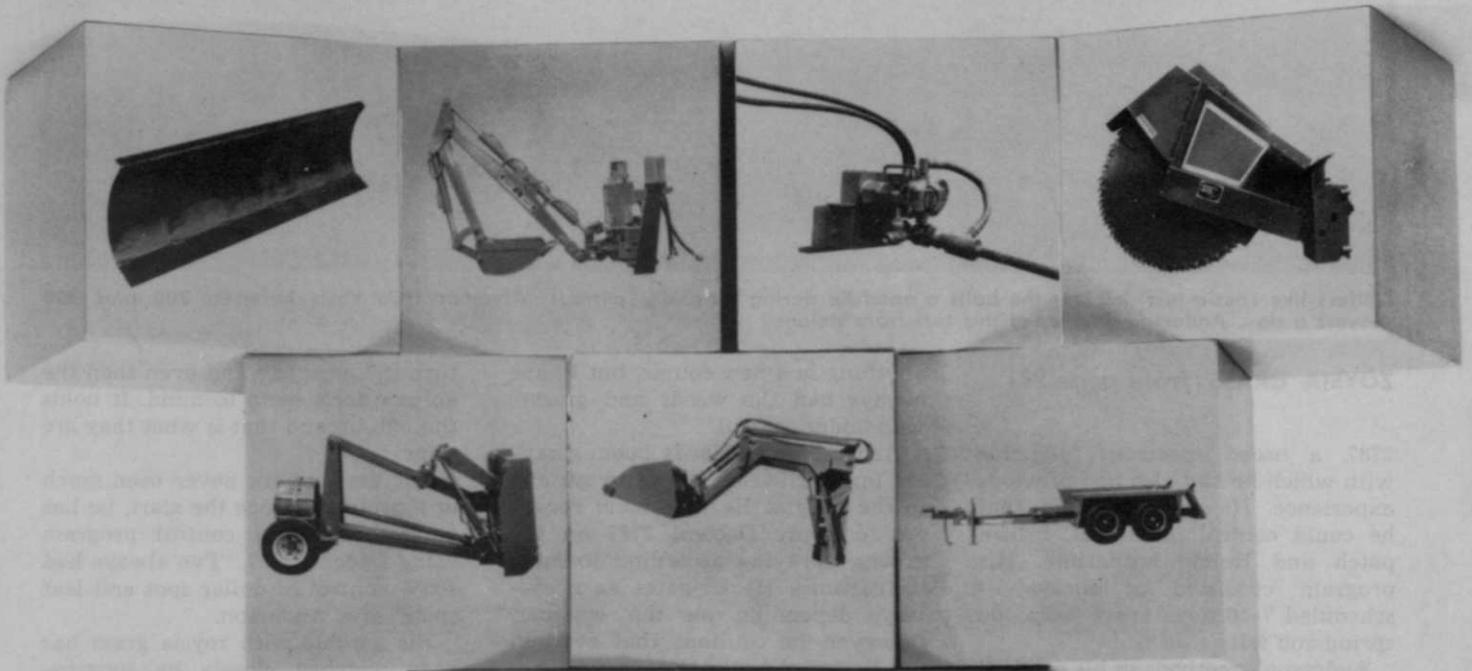
At the same time, he installed an underground irrigation system.

Weeds and fungus diseases were his next problem. On the basis of his past experience, he selected Dacthal W-75, a preemergence herbicide, to handle weeds and broadleaf grasses in his fairways, roughs and on tees. Crabgrass and chickweed were his chief targets, but he knew that Dacthal would also handle the occasional annual grasses that he anticipated.

To control disease in his C-7 bentgrass on the greens, he chose Daconil

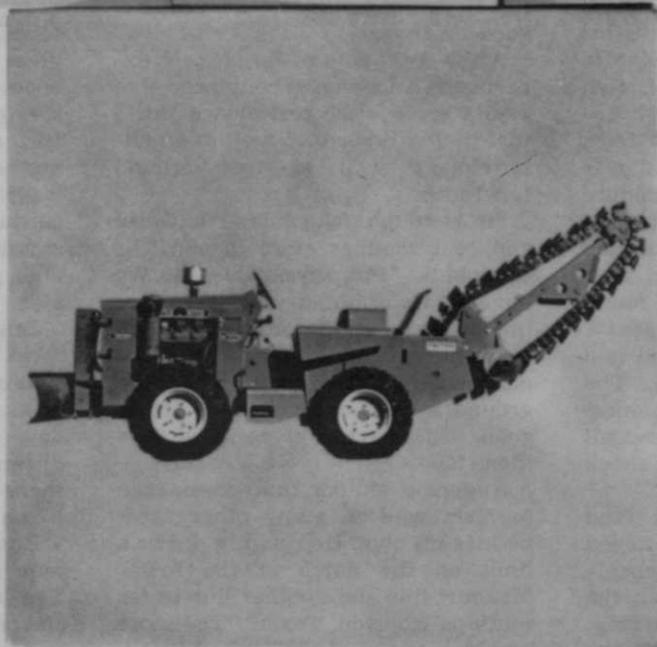
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START AT THE TOP . . . with Ditch Witch superiority! Top technical design, operational superiority, product development, service-after-the-sale. Put them all together and Ditch Witch is tops in its class, with more sales* than all the competition put together.



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Golfers like zoysia turf. It gives the balls a good lie during long dry periods. Alvamar Hills hosts between 200 and 300 players a day. Anderson developed this turf from stolons.

ZOYSIA GRASS (from page 28)

2787, a broad spectrum fungicide with which he had also had previous experience. He was confident that he could control dollarspot, brown patch and *Helminthosporium*. His program consisted of sprays — scheduled 7-10 days apart — in the spring and fall.

Anderson's methods in his original stolonization were as unusual as his decision to go all out with zoysia. He produced all the zoysia from his own nursery at Alvamar. Then he shredded the stolons in an ordinary farm ensilage grinder. The zoysia was finally spread with a regular manure sprader. He lightly dished in the stolons. Part of the course was seeded at a rate of 250 bushels per acre, another part at 300 bushels. He found no difference in the stands he got.

"Stolonizing for a good stand is a tricky process," says Anderson. "The first 10 to 15 days are the most critical. You have to keep it wet all the time until it is through the shock stage."

Though zoysia exhibits good weed resistance, Anderson has maintained a consistent chemical and mechanical weed control program from the start. Each year, he continues to treat the course with Dacthal W-75, in the spring as a preemergence control. Rate is 12 to 14 pounds per acre and application is made about April 15. "I use it primarily to get the silver and the soft crabgrass," says Anderson. "But it works on the few, occasional broadleaf weeds, too. Most everyone knows that you can get

anything in a new course, but I have always had the weeds and grasses well under control."

Anderson uses Hardy boom sprayers for Dacthal on the fairways and in the roughs. He uses hand sprayers to apply Daconil 2787 on the greens, spraying according to label instructions. He irrigates as necessary, depending on the weather. However, he cautions that even in the dryer climates, zoysia requires good drainage.

After five years of large scale experience, Anderson is convinced that zoysia grass is the best answer for a turf that will perform well in an environment such as that around Lawrence.

"It is tough to combine a warm and cool weather grass in one," he comments. "But zoysia does it. We have plenty of hot, dry weather here in Kansas, and the zoysia loves it. Between severe winter storms, we also have a lot of days when the ground is clear and golfing is pretty good. The zoysia gives good turf then, too."

Anderson thinks that zoysia can perform well in many other areas besides his own. He roughly draws a limit on the north at the Iowa-Missouri line and another line as far south as Houston, Texas. "The more humid portions of the United States and a longer growing season may tend to produce a matty, thatching condition," he thinks. Soil types all look about alike to zoysia, he maintains.

Anderson doesn't worry much about zoysia's reputation for tanning out. "It takes a good, hard freeze to

turn it," he says, "and even then the golfers don't seem to mind. It holds the ball up and that is what they are after."

The greens have never been much of a problem. Since the start, he has kept them on a control program using Daconil 2787. "I've always had 100% control of dollar spot and leaf spot," says Anderson.

His gamble with zoysia grass has been watched closely by superintendents throughout the area. He gives regular reports on his experiences to the University of Missouri turf grass conferences, and to other turf meetings. Several golf courses are now testing zoysia on a few fairways. "I get a lot of calls for consulting work and for installation of zoysia in fairways, football fields, and golf course construction," he says.

But most important of all, golfers seem to like Alvamar Hills Golf Course and its zoysia. The course hosts between 200 and 300 players a day, and some travel considerable distances to get to it. "Sometimes there are so many strangers, it looks like a resort course," says Anderson.

Business is so brisk that another nine holes are under development. The addition, which is being built on cleared timberland, will be open to the public in June, 1973. Mel Anderson's formula will be the same. Soil-testing to determine fertilizer requirements, zoysia grass stolons chopped and applied with a manure spreader, preemergence application of Dacthal with annual treatments to follow, and use of Daconil 2787 on the greens.