

Pictures of the speakers from the Chicago District Golf Association Green Seminar held April 5th, 1983 at the Butterfield C.C.



Rees Jones, Golf Course Architect, the featured speaker on the CDGA Green Seminar.



Tom Wilcox, Professional, Sunset Ridge C.C. explained their program of re-shaping greens and re-contouring fairways at Sunset Ridge C.C.



Stanley Zontek, USGA Green Section, moderating the triplex mowing of fairways session.

GOLF COURSE IRRIGATION SALES CO.

Div. of Halloran & Yauch, Inc.
2040 Lehigh Ave., Glenview, Ill. 60025

**CUSTOM PUMP HOUSE CONSTRUCTION
AND REMODELING!**

IRRIGATION INSTALLATION & REMODELING!

GOLF COURSE DRAINAGE SYSTEMS!

**Call Us For Your Golf
Course Irrigation Needs!**

312-729-1625

**The tough bluegrass for collars and
tees.**

**Warren's®
A-20
KENTUCKY BLUEGRASS
SOD**

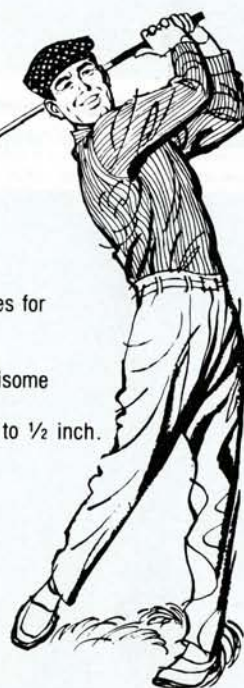
- Excellent for disease resistance.
- Rated superior over 41 bluegrasses for quality and density.
- Rated high for wear tolerance.
- Deep rooting with an extensive rhizome system.
- Thrives with short mowing, down to 1/2 inch.
- Beautiful dark green color.

Also available:

Warren's A-34 BenSun Sun & Shade
Seed Mixture for fairways.

Bentgrass sod.

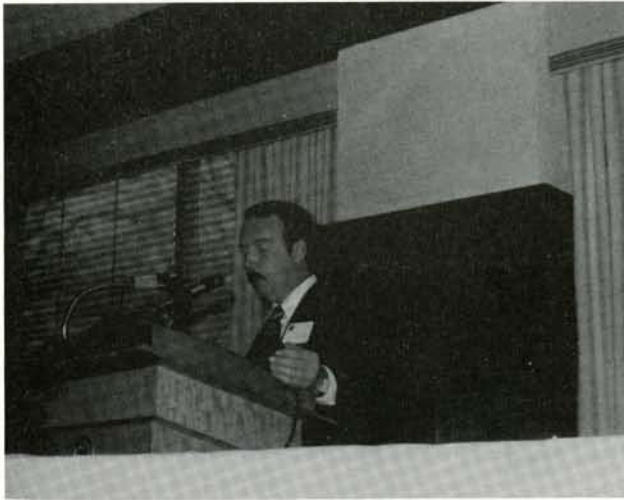
USS Vertagreen Fertilizer



Warren's
TURF NURSERY, INC.

Phone (312) 460-6606

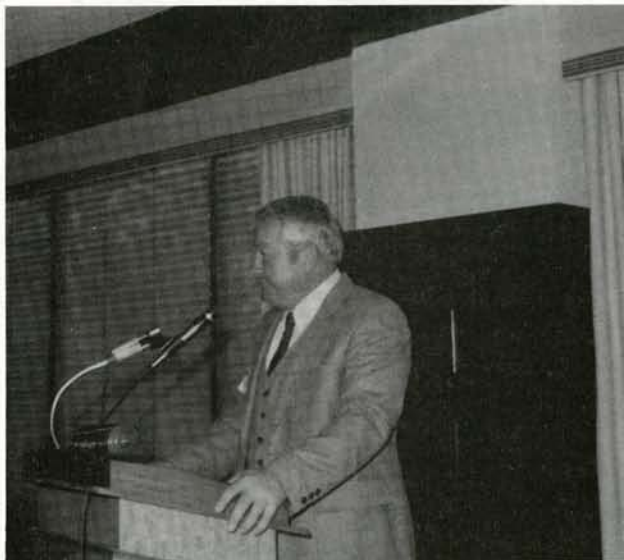
Rt. 2, Box 243
14000 S. Bell Road
Lockport, IL 60441



Bruce Williams, Bob O'Link Golf Club, describing his program of testing tri-plex mowing of fairways and related costs comparisons.



Oscar Miles, Butler National, explaining his program and costs of mowing fairways at Butler with tri-plex mowers.



Carl Hopphan, Aurora C.C., the moderator for the Turf Research Update with the University of Illinois.

THE VALUE OF GRADUATE STUDIES

Advanced or graduate training in any scientific area is a vital component of technological advancements. The biological and scientific complexities demand intensive training and detailed research. The graduate program is the thread that binds together the problems, studies, solutions and responses.

Graduate study offers intensive training in specific areas. Graduate research should be innovative and generally is based on problem solving.

The creative mind that responds to the current problems in turfgrass management offers us a better future. Preserving and improving our environment is an integral facet of the profession.

Graduate programs are based on recognizing a problem, determining methods of solution and arriving at satisfactory conclusions.

The research, preparation and defense of a thesis demands a soundly-based problem dealt with in a logical scientific manner.

Each graduate student is responsible not only to a graduate committee but has the resources and counsel of a group of professionals that represent a variety of disciplines.

The demands of a graduate program aid in the development of fertile minds and contribute to elevated levels of competence. The diversity of technology is well illustrated by the fact that there are many fields in which PhD degrees are granted at major universities.

A graduate program offers or provides the time for valuable inter-personal experience between staff and student. In most disciplines training for the Bachelor degree requires 4 years, the Masters, 2 years, and a PhD degree requires approximately three years — a nine year commitment for learning.

With an advanced degree, one is qualified to fill positions of teaching, research and/or extension as may occur in universities, institutes, industries and general business.

Informed and dedicated leaders have made possible the high level of technology we now enjoy. We must continue to provide well-trained teachers and scientists for the future.

Seeking out and motivating bright minds and adequately supporting them during their years of training challenges the best of institutions and industry.

NOTE: This statement on graduate studies was written by Dr. W. H. Daniel, Purdue University and Musser Foundation Board Member. In it one may read the reasons why the Musser Foundation is committed to helping finance exceptional students who are earning their advanced degrees. They are our FUTURE.

— Fred V. Grau

WANTED

Aero Blade Grass Seeder, walk behind, in good or working condition. Contact:

Andrew Otting, Scott Byron & Co., 705 Old Rockland Road, Lake Bluff, IL 60044 or call (312) 234-3230.

Schroeder's Nursery, Inc.



TREES - EVERGREENS - SHRUBS

Specializing in large Caliper shade trees and Ornamentals.
We also offer complete installation service.

TELEPHONE: (312) 546-9444

Richard A. Schroeder
Don Virgens
Carl Dravis

GRAYSLAKE, ILLINOIS
23379W Route 60

Nursery on Rt. 60 between Rtes. 12 (Volo) and 83 (Ivanhoe)

Nels J. Johnson, Tree Experts, Inc.

SINCE 1930

Nels J. Johnson, Sr.
Nels J. Johnson, Jr. - Karl G. Johnson
Complete, economical tree service for Private Estates,
Parks, Municipalities, Golf Courses, Cemeteries,
Schools, Industrial Areas.

All phases of Arboriculture, Diagnosing, Pruning, Treating,
Transplanting, Fertilization, Hydraulic and Mist Spraying.
Removals. Stump Routing. Municipal Forestry. Chemotherapy
for elms, and other trees.

• FULLY INSURED •

Graduate -- Licensed Arborists

MAIN OFFICE - 912 Pitner Avenue, Evanston, Illinois 60202
Phones: GR 5-1877 - GR 5-5255
Hinsdale, Illinois - FA 5-0970

PAARLBERG CHEMICALS featuring

- Par-Ex Fertilizer
- Vertagreen Fertilizer
- Du Pont Chemicals
- Chipco Chemicals
- Daconil - Dacthal
- Bean Sprayers
- All Major Turf Supplies

Quality • Value • Service

1840 E. 172nd St., So. Holland
312-474-3086 312-258-3485

LABOR-SAVING GRASSES



GLADE KENTUCKY BLUEGRASS

- Does Great in Sun Or 60% Shade
- Excellent Disease Resistance to Powdery Mildew - Stripe Smut - Leafspot - Rust
- Quick Recovery - Fast Germinating

Adelphi

KENTUCKY BLUEGRASS

- Greens Up Earlier in Spring - Stays Green Longer In Fall
- Great Resistance To Disease

CITATION

FINE LEAF PERENNIAL RYEGRASS

- Improved Mowing Qualities
- Blends Well With All Other Grasses

- Low Growing - Tolerates Close Mowing

- Performs Great In Hot, Humid Areas

FOR MORE DETAILED INFORMATION AND
TEST RESULTS WRITE TO:
VAUGHAN'S

5300 Katrine Avenue, Downers Grove, Illinois 60515, (312) 969-6300
WAREHOUSES LOCATED IN:
Bound Brook, New Jersey • Landover, Maryland • Ovid and
Grand Ledge, Michigan • Spokane, Washington



TimberLine, Inc.

WE OFFER FAST, DEPENDABLE SERVICE — EXPERIENCED IN
EXPANSION & RENOVATION OF TEES & SAND TRAPS, IMPROVEMENT OF
PATHS, EXCAVATING, BACKHOE WORK, DIRT HANDLING & LEVELING.
IF YOU HAVE ANY QUESTIONS OR NEED REFERENCE OR TESTIMONIALS PLEASE CALL
BUSINESS AND ANSWERING SERVICE 963-9088. HOME 963-4510.

Timberline, Inc., 1129 Jefferson, D.G. Ill. 60515, Bill Boyd

NATIONAL CHEMSEARCH CORP.

222 South Central Ave.
St. Louis, Missouri 63105

McGinty
BROS., INC.

LAWN CARE TREE CARE
Weed, Crabgrass and Disease Tree Spraying, Feeding,
Control/Fertilizing Surgery, Trimming, Removal
HYDROSEEDING

RT. 2, BOX 518, LONG GROVE ROAD
LONG GROVE, ILLINOIS 60047 / (312) 438-5161

GET THE JUMP ON SPRING DISEASES WITH AN EARLY TREATMENT REGIME

Your turf survived the ravages of winter due to successful transitional management. But, is it prepared to handle the onslaught of spring diseases, namely leaf spot, melting-out and dollar spot?

"Unless you get a jump on spring diseases with early fungicide treatments, you may play a losing game called 'catch-up' the rest of the year," warns Joseph Niedbalski, TUCO plant health specialist, product/field development.

Your turf may appear vibrant, healthy and green now, but it's condition during summer — a period of environmental stress, intense disease pressure and heavy play — is what counts.

Once diseases gain the upper hand, you're forced to spray more frequently in a desperate attempt to halt their unrelenting spread. This 'catch-up' approach is costly, resulting in damaged turf, dissatisfied golfers and devastated superintendents.

One way to prevent disasters and minimize turf loss is to identify major disease problems now — before they occur. This approach allows you to implement a disease control program to effectively combat your specific problems.

"The key to controlling spring turf diseases is early fungicide treatments before diseases establish themselves," says Niedbalski. "Once established, diseases spread rapidly and are extremely difficult to control."

He recommends applying a turf fungicide such as Acti-dione RZ® or Acti-dione TGF® immediately after the first mowing. "Furthermore, early applications may serve to reduce the number of treatments required during summer."

An early spray program enables you to obtain the healthiest turf possible from Memorial Day through Labor Day when the bulk of golfers are on the course. "Strong, healthy turf is better able to resist disease epidemics than turf in a weakened condition," he states.

According to Niedbalski, a number of factors influence disease severity. "Some people assume a mild winter causes more disease activity in the spring. This isn't necessarily true," explains Niedbalski. "A mild winter may result in greater fungal inoculum density, however, disease severity depends on favorable environmental conditions. Temperature, humidity levels, amount of rainfall, course location and turfgrass species all affect disease activity."

Effective control of leaf spot (*Helminthosporium* species) demands an early treatment regime. Leaf spot overwinters in thatch and a large number of spores are produced during late fall, winter and spring months.

Spring rains splash these spores onto emerging leaf blades, causing lesions that are tan in the center and dark brown on the edge. As the disease progresses, the crown becomes infected and the plant may rot. If not treated, severe leaf spot infections, also known as melting-out, can wipe out large areas of turf. Conditions favoring the development of leaf spot include close cutting, excessive irrigation and a high level of nitrogen.

Regular, early applications of Acti-dione RZ which contains an antibiotic — Anti-dione — and PCNB, create a fungistat barrier which helps keep diseases, such as leaf spot, from spreading. "Regular applications should be made at 14- to 21-day intervals. Disease severity may dictate a shortened interval of 7 to 10 days for at least 2 to 3 applications."

Dollar spot, an early fall disease, is also a problem in the late spring. Warm days and cool nights provide an ideal setting for the development of dollar spot, as does a low nitrogen

level, dry soil and high humidity. Disease symptoms appear as light tan lesions with a reddish border on the leaf blade.

"To control dollar spot, apply Acti-dione TGF after first mowing in the spring," says Niedbalski. "After the first spray, follow a 7- to 10-day treatment schedule to mid-May for optimum control."

Disease-causing fungi are present year-round and are a constant threat to golf courses across the country. Many superintendents have discovered the most economical and effective approach to vigorous, healthy turf is a well-planned four-season disease management program.

By getting a jump on spring diseases with early fungicide applications, superintendents can maintain quality turf throughout peak play periods.

The Upjohn Co.



Dr. David J. Wehner, Turfgrass Specialist at U. of I. discussing his program of research and trials at Urbana.



Dr. Hank Wilkenson, Plant Pathologist at U of I explaining his research program.



David Ward explaining his sand topdressing programs at Ravisloe C.C. and moderating the Sand Topdressing of Greens session.



Huber Ranch Sod Nursery, Inc.

Route 41, Schneider, Indiana 46376

**COMPLETE SUPPLIER OF ALL YOUR GOLF
COURSE AND LANDSCAPE NEEDS**

- Penncross Sod
- Penneagle Sod
- "Executive" blend bluegrass sod ideal for bluegrass tees
- Par-x, Vertagreen and Milorganite Fertilizers
- Full line of NK Seed, etc.
- A Full Line of Chemicals, sprayers, spreaders, etc.
- Par Aide & Standard Golf Equipment

All products are palletized and fork-lift delivered.

Indiana 219/552-0552
Chicago 312/641-2898

NEWSLETTER ARTICLE ASSIGNMENTS "BULL SHEET"

June
July
August
September
October

John Stephenson
Joe Williamson
Dave Behrman
Mike Hart
Ken Goodman

CHARGING THE PRESSURE TANK

For those who have automatic pumping plants which incorporate a pressure tank, it is suggested that the air-water operating ratio be 60% air and 40% water. This ratio will permit the pressure pumps to operate within the desirable pressure limits.

One method to obtain the above 60/40 air-water ratio in the tank is to start the air compressor, **while the tank is still empty** and raise the air pressure to 60% of the system operating pressure, I.E. if the system operates at 100 lbs. then operate the air compressor until the pressure reaches 60 lbs. (100 x 60%), or if the system pressure is 130 lbs. then run the compressor until the air pressure in the tank reaches 130 x 60%, or 78 lbs. Once this pressure is established in the tank the pressure pump can be started and when the tank becomes 40% filled with water it will be found that the tank pressure has increased to the desired operating pressure of the system. In other words, the original volume of air in the tank has been compressed into 60% of its former volume and the pressure increases in direct proportion.

C. E. (Scotty) Stewart



Wayne Otto telling his eight years on sand topdressing of his greens at the Ozaukee C.C., Mequon, Wisconsin.



Warren Bidwell telling it the way it is: "There are too many locker room agronomists, and they should leave the driving to us." "Sand topdressing on greens is just a quick fix that may turn into a time bomb down the road."

WELL WATER TEMPERATURE

A mistaken idea held by some is that well water, owing to its low temperature, will chill turf when discharged directly through a sprinkler and considerable sums of money have been needlessly spent on the construction of so called "tempering ponds" to hold and warm well water before its use for irrigating.

In the Chicago area we have three main sources of well water and the temperatures of the water delivered from them at ground level is as follows:

1. Where the well is about 400 feet in depth the water is obtained from the crevices in the Niagaran limestone formation and is produced at 53 deg. F. temperature.
2. Where the well is about 800 feet in depth the water is obtained from the St. Peter sandstone formation and is produced at 56 deg. F. temperature.
3. Where the well is about 1500 feet in depth the water is obtained from the Galesville sandstone formation and is produced at 59 deg. F. temperature.

It will be noted that the water temperature increases in relation to the depth of the well.

Regardless of any of the above temperatures it will be found that when the water is discharged and properly broken up into droplets by a modern sprinkler that these droplets in falling through the air will almost even themselves up to the existing air temperature. It might be noted that the reverse action takes place with high temperature water.

C. E. (Scotty) Stewart

With 27 field-proven formulas we may have more solutions than you have problems.

Distributed by:

Turf & Tree Supplies
Rockton, Illinois
815-624-7578

Turf Products Ltd.
W. Chicago, Illinois
312-668-5537

the professional's
partner™

**The
Andersons**

Lawn Fertilizer Division
P.O. Box 119
Maumee, Ohio 43537
Ohio:
800-472-3220
Outside Ohio:
800-537-3370



Arthur Clesen Inc.

CHEMICALS—aquatic, fungicide, herbicide & insecticide

DECORATIVE MULCHES—chunk bark & shredded mulches, bag or bulk

FERTILIZERS—Country Club, Vertagreen, spray applied, minor elements & bulk blends

GRASS SEED—improved varieties, custom mixes, prairie grass & wild flowers

HAND TOOLS—loppers, pruners, rakes, saws & shovels

HOSE—hose, accessories & reels

HYDRO MULCH/SOIL STABILIZERS

ICE MELT

OIL ABSORBENTS

PAINT—Easy Marker & Tree Kote

SOIL CONDITIONERS—gypsum, lime, peat moss, perlite, sulfur & terra green

SPRAYERS—Myers, Solo, Universeal & Wheel Spray

SPREADERS—Cyclone, Diadem & Lely

543 DIENS DR. (312) 537-2177 WHEELING, IL 60090

RUSTIC-CRAFT SIGNS

*Custom Engraved
& Sandblasted
Redwood Markers*

- * Cart Signs
- * Wood Benches
- * Tee Data Signs
- * Wood Accessories

Quality Work, at
Reasonable Prices

Call or Write, for Information

(815) 653-9076
P. O. Box 301
Richmond, IL 60071

White Grubs—

There are several species of beetles, including chafers, in the white grub family. Some common characteristics include:

- One- to three-year life cycles
- C-shaped larvae, 3/4 to 1-1/2 inches long, cream or gray with brown head
- root and rhizome feeders that destroy root system, leaving irregular brown patches
- dead or dying turf often appears in April, May, September, October and November.

"A fairly new white grub problem, **Ataenius spretulus**, causes considerable damage to fairways, greens and tees. This pest prefers Poa and bentgrass turf, but also damages bluegrasses and other species. Damage first appears in mid-June and extends into July or August," says Parham, who recommends looking for the pest in three-day intervals during the middle to latter part of June.

About the size of a grain of rice, this destructive white grub usually can be found in the top two to three inches of soil where they feed on grass roots.

"The underground feeding of white grubs ruins turf appearance and kills the grass," explains Parham. "This damage often requires replacing the turf — a costly and time-consuming effort."

According to Parham, insect pressures often develop locally — not always in the same area or over the entire golf course. "By using an organophosphate such as Proxol 80 SP, you have the option of treating only those areas that are infested," says Parham.

Water-soluble Proxol 80 SP gives fast, effective control of surface-feeding pests such as the armyworm, cutworm and sod webworm, and white grubs (including **Ataenius spretulus**).

"For surface feeders, two to five larvae per square foot is an economic threshold level often used to determine when to treat, but these levels are dependent upon local conditions," notes Parham. He recommends applying Proxol 80 SP when insect populations reach levels sufficient to warrant control measures.

"The most effective time for controlling white grubs is during the larval stage. "Second instar larvae are easier to control than older larvae. Treatments should be applied and carefully watered-in during late April to mid-May for control of the first generation, and again in mid-August, September or October for control of the second generation," recommends Parham. "Six to eight one-year cycle larvae per square foot is a commonly used economic threshold level. However, some states recommend treating at a lower threshold level, thus it's wise to check the guidelines recommended for your geographic area."

Proxol® 80 SP readily penetrates thatch, and golfers are not exposed to a granular residue left on the turf. It can be applied with conventional ground spray equipment and Proxol 80 SP is compatible with other commonly used fungicides and insecticides.

When used at the recommended rates, Proxol 80 SP control principal damage-causing insects without significantly affecting beneficial insects.

"Monitoring turf for pests and treating on an 'as needed' basis is an economical and effective approach to insect control," states Parham. "A preplanned program of attack provides healthy, vibrant turf for optimum playability."

Dr. Price Parham



MURRAY AND TRETTEL INCORPORATED
CERTIFIED CONSULTING METEOROLOGISTS
414 WEST FRONTAGE ROAD
NORTHFIELD, ILLINOIS 60093

FORECAST SERVICE FOR GOLF COURSES

- ..ALLOWS YOU TO ACT WITH THE WEATHER
INSTEAD OF REACTING TO IT
- ..FACILITATES OPTIMUM PLANNING,
SCHEDULING OF WORK, EQUIPMENT,
AND PERSONNEL
- ..INDIVIDUAL CONSULTATION WITH
A PROFESSIONAL METEOROLOGIST
- ..PROVIDES YOU WITH THE DETAILS
- ..24 HOURS A DAY

CONTACT: MARK EVANS
MARKETING METEOROLOGIST
312/446-7800

PRECISION BLENDED TOP DRESSING

Custom blended to your specifications
by our modern equipment.

*Buy when you need —
Eliminate costly storage*

We sell an air dried, uniform and
free flowing top dressing.

ASK THE MAN WHO HAS USED IT.

HUMUS — BLACK SOIL

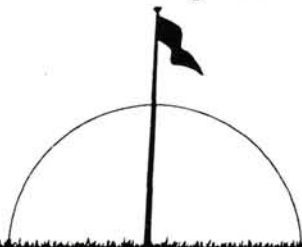
HENRY FRENZER

Area Code 312
658-5303

620 Webster St.
Algonquin, Ill.
60102

The Very First Systemic in FLOWABLE Form

CLEARY'S 3336-F Fungicide



The dawn of a better technology. FLOWABLE.

Cleary's 3336 Systemic Fungicide has earned your confidence in the prevention and control of dollar spot and 6 other major diseases. Today W.A. Cleary announces the development of 3336-F, the first systemic in flowable form. Flowables are simpler and safer for the user to handle. Need little agitation. Will not clog spray nozzles. Offer a uniform particle distribution for excellent availability to the plant. Cleary's new **3336-F FLOWABLE**.

Now available at application cost less than systemic wettable powders.

FOR FURTHER INFORMATION SEE YOUR LOCAL DISTRIBUTOR OR CONTACT



W.A. CLEARY CHEMICAL
CORPORATION

1049 Somerset St., Somerset, N.J. 08873 (201) 247-8000



2 N 255 County Farm Rd.

West Chicago, Ill. 60185

Phone 668-5537

KOELPER BROS., INC.

Golf Course Building and Remodeling

444 E. Mors Avenue

Wheeling, Illinois 60090

312-438-7881

DANIEL I. KOELPER

312-541-9182

VICTOR C. KOELPER



par ex®

PROFESSIONAL PRODUCTS

IBDU® (31-0-0) and PAR EX® fertilizers with IBDU are custom formulated for high maintenance, high quality turfgrass. Check with your local PAR EX territory manager or distributor for other available grades.

Territory Manager
Cliff Belden
Eglin, IL 312/697-IBDU

Turf Products Ltd.
West Chicago, IL 312/668-5537

Paarlberg Chemicals Co.
South Holland, IL 312/474-3086

Olsen Distributing Co.
Barrington, IL 312/381-9333

Professional Turf Specialists
Normal, IL 309/454-2467

Rowland's Equipment, Inc.
Barrington, IL 312/381-1084

TERSAN® 1991 + Daconil 2787

Put the proven performers together for even better control of brown patch, dollar spot and other serious diseases.

TERSAN® 1991 fungicide and Daconil 2787* fungicide are two of the most effective disease control products on the market. And now, these proven broad-spectrum fungicides are labeled for tank mixing. Together, they give you even better control of major turf diseases than either product used alone. You get improved control, yet without the problem of phytotoxicity common with some tank mixes.

A TERSAN 1991/Daconil 2787 tank mix will give you consistent performance against brown patch and dollar spot—the two most troublesome diseases on turf each summer. You'll also get strong action on leaf spot and other important diseases. It's the kind of performance superintendents depend on when a quality course can't be compromised.

*Daconil 2787 is a registered trademark of Diamond Shamrock Corporation.

Tank mixing brings other advantages, too. With TERSAN 1991 in your tank, you get systemic action for protection from within the turf plant. Disease control is longer-lasting and is less affected by rainfall or frequent irrigation. Tank mixing fungicides with different modes of action also reduces chances of benzimidazole resistance. You help insure the long-term effectiveness of TERSAN 1991 in your disease control program.

This year, plan on using TERSAN 1991 in combination with Daconil 2787. It's the tank mix turf diseases can't match.

With any chemical, follow labeling instructions and warnings carefully.

