BOOKSTORE

410 - DISEASES & PESTS OF ORNAMENTAL PLANTS
by Pascal Pirone
This standard reference discusses diagnosis and treatment of diseases and organisms affecting nearly 500 varieties of ornamental plants grown outdoors, under glass or in the home. Easy to understand explanations of when and how to use the most effective fungicides, insecticides and other control methods. $32.50

690 - INSECTS THAT FEED ON TREES AND SHRUBS
by Johnson and Lyon
Essential information for identifying more than 650 insects, pests and injuries they cause. More than 200 color illustrations. $47.50

570 - WESTCOTT'S PLANT DISEASE HANDBOOK
by Kenneth Horst
This fourth edition offers professionals the latest diagnostic and disease control information. Plant entries designed to simplify diagnosis, plus background on the classification of plant pathogens. This handbook gives a specific description of each disease, susceptible plants, specific symptoms of the disease, reported locations and control measures for each disease and their side effects. $39.50

ADDITIONAL TITLES

340 - CONSTRUCTION DESIGN FOR LANDSCAPE ARCHITECTS $39.50
660 - DISEASES OF SHADE TREES $24.50
350 - HANDBOOK OF LANDSCAPE ARCHITECTURAL CONSTRUCTION $48.50
635 - IRRIGATION PRINCIPLES & PRACTICES $46.45
370 - LANDSCAPE OPERATIONS: MANAGEMENT, METHODS & MATERIALS $22.95
545 - MODERN WEED CONTROL $26.50
700 - THE PRUNING MANUAL $15.95
380 - RESIDENTIAL LANDSCAPING I $22.50
720 - SHRUB IDENTIFICATION $8.00
750 - TREE IDENTIFICATION $10.95
760 - TREE MAINTENANCE $37.50

Mail this coupon to: Book Sales
Harcourt Brace Jovanovich Publications
One East First Street, Duluth, MN 55802

Name ____________________________
Street Address ____________________________
P.O. Box Number ________________
City/State/Zip ____________________________
Signature ____________________________ Date ____________
Phone Number ____________________________
Purchase Order Number ____________________________

Please send me the following books. I have enclosed payment* for the total amount.

Please charge to my Visa, MasterCard or American Express (circle one)
Account Number ____________________________ Expiration Date ____________

BOOK NUMBER AND TITLE QUANTITY PRICE TOTAL PRICE

*Please add $3.00 per order plus $1.00 per additional copy for postage and handling.

Please allow 6-8 weeks for delivery.
Quantity rates available on request.

WTT 55

MAY 1985/WEEDS TREES & TURF 11
Midwest next boom for irrigation

Much of the water-rich Midwest remains almost virgin territory for home irrigation systems. That could be changing in the not-to-distant future.

Representatives from Rain Bird and Toro Irrigation told attendees at the recent Reinders Turf & Irrigation Conference that irrigation will take on increased importance, even in areas where it is now uncommon, as home owners realize the value of well-maintained lawns and landscapes.

"Irrigation awareness is growing by leaps and bounds," said Don Bulmer, district sales manager of Toro Irrigation. "The growth of irrigation is staggering."

Bulmer explained that 52 percent of single family residences in Southern California possess irrigation systems, but in the Midwest the figure drops to about 3 percent.

Bulmer, pointing to the phenomenal growth in the past decade of such amenities as automobile air conditioning and central air in homes, predicted 40 to 50 percent of all homes will have irrigation by the year 2005.

Water conservation, however, will remain a concern of irrigation companies.

"Water is becoming a very scarce commodity in many parts of the country," Rain Bird's Desi Williamson added. He said products like electronic "rain checks", which shut a system down during a rain, and "moisture sensor inhibitors", which keep a system from operating until there's a need, indicate the growing sophistication of irrigation systems.

ASSOCIATION

GCSAA outlines mid-year conference

The Hoosier Dome in Indianapolis, IN, is the site of the 1985 GCSAA Mid-Year Conference and Show. The date is Sept. 19-24.

Says GCSAA President Eugene D. Baston: "GCSAA members have expressed a need for information that will assist them in training their own staffs. With this conference, we will be answering those needs."

On the GCSAA agenda are seven education seminars, staff technician training courses, a golf/turfgrass market research workshop, a turfgrass research conference, and a national golf championship to benefit turfgrass research.

The staff technician training courses will be "hands on" with the involvement of manufacturers. They will focus on equipment repair, irrigation equipment operation, pesticide safety and applications, and golf car repair and maintenance.

In addition, 20 of the nation's leading scientists are expected to present updates on all major turfgrass research being funded with GCSAA's support.

A national "selling and buying" type exhibition trade show is planned in conjunction with the conference and an outside turfgrass equipment demonstration.

"September is an excellent time for manufacturers and distributors for golf course equipment and supplies to demonstrate their products as this is the time of the year when golf course managers plan purchases," Baston adds. "We believe this mid-year conference will be very beneficial to our members and to our advertisers and distributors."

A one-day golf championship will be played with the proceeds going to turfgrass research.

If you don't plan on seeding with MUSTANG, you may need this.

Why take chances? There's a new tall fescue whose superior turf quality, disease resistance and dark green color make it a breed apart from the others.

Mustang's high seedling vigor and excellent heat and drought resistance make it the one you can bet on. So, don't try your luck—try Mustang.

Call or write for the distributor nearest you.
MY PRIMARY BUSINESS AT THIS LOCATION IS:
(PLEASE CHECK ONE ONLY IN EITHER
A, B OR C)

**A. LANDSCAPING/GROUND CARE AT ONE OF THE FOLLOWING TYPES OF FACILITIES:**
- Golf courses (0005)
- Sport complexes (0010)
- Parks (0015)
- Rights-of-way maintenance for highways, railroads & utilities (0020)
- Schools, colleges & universities (0025)
- Industrial & office parks/plants (0030)
- Condominiums/apartments/housing developments/hotels/resorts (0035)
- Cemeteries/memorial gardens (0040)
- Military installations & prisons (0045)
- Airports (0050)
- Multiple government/municipal facilities (0055)
- Other type of facility (please specify)

**B. CONTRACTORS/SERVICE COMPANIES/CONSULTANTS:**
- Landscape contractors (installation & maintenance) (0105)
- Lawn care service companies (0110)
- Landscape architects (0115)
- Extension agents/consultants for horticulture (0120)
- Other contractor or service (please specify)

**C. SUPPLIERS:**
- Sod growers (0205)
- Dealers, distributors (0210)
- Other supplier (please specify)

Approximately how many acres of vegetation do you maintain or manage?

What is your title? (please specify)

I would like to receive (continue receiving) WEEDS TREES & TURF each month: YES □ NO □

Your Signature: ____________________________ Date: ____________________________
Celanese doesn't make lawn sprinklers, but Celanese Celcon® acetal copolymer has been selected for components of Rain Bird's rugged new MINI-PAW® pop-up sprinklers because quality demands quality.

Our Celcon® "popped-up" to Rain Bird's stiff demands for performance and durability due to its remarkable ability to resist corrosion and chemicals (like fertilizers and insecticides), high water pressures, widely ranging outdoor temperatures and the debilitating effects of ultraviolet light—conditions typical of MINI-PAW® application environments—while still operating smoothly... Celcon® retains its rigidity, impact, lubricity and load-bearing properties.

The processability of Celcon® makes fabrication of these parts easier and more cost-effective, reduces lead times, part and tooling costs, and speeds up production. That's Celanese Quality... at work!

For all the quality facts, contact Pete Demma, Celanese Engineering Resins, 26 Main St., Chatham, NJ 07928; (201) 635-2600.

Other Celanese quality products include Celanex® Thermoplastic Polyester and Celanese® Nylon.

Circle No. 106 on Reader Inquiry Card
**GOVERNMENT UPDATE**

**Groundwater scare spreads**

Concern over contamination of groundwater in New York, Florida and New Jersey is spreading to other states, the most recent being Connecticut. The Connecticut Tree Protective Association sent a legislative alert out to arborists and landscapers in late February to help counteract overzealous state lawmakers excited by recent groundwater contamination stories.

Industry members get concerned when state laws venture too far from national ones. In this case, two bills are in question. One requires monthly reports to the Connecticut Department of Environmental Protection and posting of job sites. Another would allow the state to change the classification of a pesticide regardless of Federal action.

**Seed label laws come to terms**

'Noxious' or 'undesirable' makes a big difference to seed companies in Pennsylvania and other Atlantic states.

Afraid of different labelling requirements for each state, people like Adikes' Bob Russell are opposed to new state seed label laws. Others, like Penn State University's Dr. Joe Duich, feel stronger laws will improve the overall image of seed from reputable companies.

The biggest problem may be the states don't talk to each other when formulating their regulations, or do they? Progress has been made through regional regulatory officials, helping change the terminology of 'noxious', required by state laws on seed labels, to 'undesirable'. But the battle is not over, even with the change in terminology. It should be a hot topic at the American Seed Trade Association meeting this summer.

**Reclamation laws may fall short**

When abandoned mine reclamation funds expire in 1992, thousands of acres of scarred lands will remain, according to a recent report by the Tennessee Valley Authority.

Not only are the lands scarred, but they pour nearly 2,400 tons of sediment per square mile per year into Tennessee Valley waterways alone. The TVA report states, "The abandoned mine problem will not go away; rather it will, in many cases, become more critical and costly to solve."

The Federal Reclamation laws were first implemented in 1977. They represented a great opportunity for landscape contractors, but much of this potential was lost as mining companies battled the laws in court.

TVA has developed a report, Orphans of the Valley, to describe the seriousness of reclamation laws falling short.

**ASSOCIATION**

**Florida nurserymen seek bad check law**

The Florida Nurserymen and Growers Association is pressing the state legislature there to stiffen bad check laws. If successful, the familiar refrain "the check is in the mail"—particularly if it's a bad check—might not be so common.

"From a commercial standpoint, this issue of bad checks is a big problem," Allen Bernard, executive vice president of the FNGA, tells Weeds Trees & Turf. "Our effort is a move to put some teeth into the law."

Current Florida law almost requires a check to be signed in front of a merchant before the drawer can be prosecuted for writing a bad check. Therefore prosecution arising from checks delivered by deliverymen or through the mail is rare. The problem of postdated checks has also caused dissatisfaction with present laws.

The FNGA is asking the legislature to rewrite the statute to allow businesses to create a check cashing card file for each customer which would include name, address, telephone number and signature of that customer. The card could be used as a basis of identification for the check writer—the main stumbling block to prosecution in the present law. Postdated checks would be eliminated as well.

"Even with these changes very few would ever be prosecuted," Bernard adds. "But the threat of prosecution might get them to pay, and that's really the intent of it all."

A draft of the FNGA proposal, which is gaining support from other non-related industries, is in legislative committee.

**ATHLETIC FIELDS**

**Toma speaks, crowd big at Sports Institute**

The Sports Turf Institute, held in March at California State Polytechnic University, Pomona, doubled in size from its inaugural meeting last year.

Show organizer Professor Kent Kurtz started with the conference last year based on requests received by the University for assistance with both professional and school fields. The first show last May attracted more than 250 field managers and 8 exhibitors. This year's show drew more than 550 field managers and 30 exhibitors.

It also attracted stadium management from the Rose Bowl, San Diego Stadium, Anaheim Stadium and the Los Angeles Coliseum.

Well-known sports field expert continued on page 84
An unbeatable twosome on the golf course

Duosan is Mallinckrodt's double-action broad spectrum fungicide. It goes to work instantly as a contact fungicide, then remains active as a systemic fungicide.

Duosan effectively controls 8 turf diseases — including Leaf Spot, Red Thread, Dollar Spot and Brown Patch — and it's now also approved for control of 9 tree and shrub problems including Apple Scab, Rust, Anthracnose, Powdery and Downy Mildews, and others.

With just one fungicide — DUOSAN — you can control 17 disease problems on turf, trees, and shrubs!

Dymet is Mallinckrodt's double-action insecticide. It delivers a quick kill upon contact, then provides long-lasting residual control.

Dymet is effective against surface insects such as Cutworms, Chinchbugs, and Sod Webworms, and can also be mixed for use on sub-surface pests. In addition, it controls a wide variety of insects on trees, shrubs, and ornamentals.

With just one insecticide — DYMET — you can control 25 insects on turf, trees, and shrubs!

For more information, call toll-free today. Or, contact your Mallinckrodt distributor.
Although many of the students stretched their remembrances of their former professor for a chuckle, the thanks were heartfelt. “One of the real strong points that separate him from other professors is his sincere interest in his students, even when they leave Purdue,” says Charlie Tadge, superintendent of Mayfield Country Club near Cleveland and a 1958 Purdue grad. “He keeps track of his students and has helped many of us in our careers.”

At a dinner in the Purdue Memorial Union the following night Bruce Shank, executive editor of Weeds Trees & Turf magazine, presented Daniel with the publication’s “Man of the Year” Award. He is the fourth recipient of the award. Previously honored by the magazine were: Dr. Fred Grau, Monty Moncrief, and Al Radko.

Filling the void in Purdue’s Department of Agronomy left by Daniel’s retirement promises to be a tall order. Members of a university search committee met soon after the conference to solidify a job description for a “quality” replacement. “We hope to attract somebody that’s already out in the professional ranks,” a university spokesperson, says. “We think it’s an attractive enough situation to advertise at the associate professor level.”

As for Daniel, looking fit and trim at the conference, retirement from academia probably means a greater involvement with the promotion and marketing of his PAT system for athletic fields.

GOLF

Fiber covers can save turf

Dr. John Roberts says golf course managers in the North should recognize fiber turf covers as a valuable “tool” in maintaining greens on their courses. They can be of particular value in the period between the spring thaw and the opening of a course for play.

Roberts of the University of New Hampshire says spun-bonded, polyester covers used on New England courses helped in four ways:
1. by reducing dessication
2. by speeding spring green-up
3. by keeping unwanted traffic off greens
4. by hastening seed germination rates by as much as 10 days.

Although several materials were tested, Roberts says the most effective seems to be a translucent material weighing one ounce and costing about five cents per sq. meter. This material (Reemay by DuPont) allows light to reach the turf, encouraging "normal" growth, he points out.

Roberts made these comments at the recent Midwest Regional Turf Conference at Purdue University.

EDUCATION

Toro funds endowment; announces competition

Good news from Toro Irrigation for the landscape industry. Toro, through an endowment fund, is financing a course book on irrigation. The California-based company is making direct contributions totalling $50,000 over five years to the program. Interest from the fund is earmarked for use by The Landscape Architecture Foundation, Washington D.C., in putting together the irrigation reference book (in the format of the LAF “Handbook” series). Other educational materials will be funded from the endowment.

continued on page 84
UNIVERSITY SCORECARDS PROVE IT.

TERSAN® 1991 controls brown patch and anthracnose better than the fungicide you are now using.

If you're not using TERSAN® 1991 fungicide you're not getting the best brown patch and anthracnose control. Test results, like these from Michigan State University on anthracnose and the University of Maryland on brown patch, prove nothing works better than Du Pont TERSAN 1991 fungicide against these two turf diseases.

Many new fungicides provide poor control of brown patch and anthracnose, especially under heavy disease pressure. Their extended spray intervals recommended for other turf diseases, such as dollar spot, are too long to provide adequate protection against brown patch and anthracnose.

TERSAN 1991 is well suited to handle the heaviest disease pressure. Its unique systemic activity withstands heavy rainfall and frequent watering for longer-lasting disease control. And TERSAN 1991 may be applied for anthracnose control either preventively or after the disease is already present.

Schedule TERSAN 1991 in your summer spray program. Apply it in tank mixtures or as supplemental applications from June through August, when brown patch and anthracnose threaten.

You'll get tee-to-green control that hits brown patch and anthracnose hard. Control that university tests prove works even under heavy disease pressure...TERSAN 1991. Only from Du Pont.

The following products are registered trademarks:

1. Vorlan, Duosan, and Fungo 50—Mallinckrodt, Inc.
2. Bayleton—Moby Chemical Co.
3. Rubigan—Elanco Products Co.
4. Daconil—SDS Biotec Corp.
5. Actidione TGF and Actidione RZ—TUCO Div. of Upjohn Co.

With any chemical, follow label instructions and warnings carefully.

Circle No. 114 on Reader Inquiry Card
What makes our front mower so

There are a lot of good reasons to own a John Deere front mower. For one thing, it's a John Deere. Which means you can expect it to last for years and years. (Some of our lawn & garden tractors built 21 years ago are still out there cutting.)

Then there's the matter of parts. Your local dealer has most of them right in stock, so there's none of the waiting you often find with other mowers. And those same local dealers can provide you with something else that's very important. Fast service. On those rare occasions when you need repairs, they have the people that can diagnose the problem and have you back mowing in no time.

As we said, there are a lot of good reasons for owning a John Deere front mower. Well now we've added one more. Our new