

**Zoysia seeding may replace plugging** 

United States Department of Agriculture has discovered a method of propagating zoysiagrass by seed, according to the USDA. The discovery is particularly noteworthy to the turfgrass industry because zoysia's use has previously been limited by its inability to be adequately spread by seed.

Dr. Doyi Yeam and research agronomist Jack Murray first suggested an alternative technique to the traditional "plugging" method of zoysia germination while doing research at the USDA's Beltsville Agricultural Research Center. They found that by

CHEMICALS

## Diamond Shamrock earmarks \$20 million for Dacthal plant

Diamond Shamrock Corp., Cleveland, OH, has approved funds for the reconstruction of the Agricultural Chemicals division's Dacthal plant in Houston, TX.

Plant reconstruction will begin early

soaking seeds in a 34 percent potassium hydroxide (KOH) solution for 25 minutes and then exposing them to 48 hours of low intensity light, they could induce more than 90 percent of the zoysia seed to germinate within six days. Untreated seed takes six weeks to reach 30 percent germination.

The KOH solution breaks the seed coat and eliminates a growth inhibiting enzyme present in the seed, while the low intensity light stimulates rapid and uniform germination, explained Murray.

Zoysia propagated by treated seed

in 1982 with the project scheduled to be completed by the end of the 1982 third quarter. The total cost will be in excess of \$20 million. Dacthal herbicide is expected to be available for the 1983 growing season.

Engineering work for the plant's reconstruction is already underway. Demolition of the damaged portion of the plant has already been completed.

Dacthal production was halted in July, 1981, when an explosion damaged the Houston plant.



**Derby perennial ryegrass,** International Seed Co., Halsey, OR, was advertised on a hot air balloon at the Southern California Turf and Landscape Equipment Show. The balloon was coowned by Bud Franklin, Capitol Nursery, Phoenix, AZ and Gary Harrington, Mesa Country, Club, Mesa, AZ. (See Landscape Update on page 11.)

was also found to spread at least twice as rapidly than when established by any other method. After only three weeks, 67 percent of the treated seed area was covered by grass, with an average of 218 plants per square foot. Untreated seed, by comparison, had covered only three percent of its area, averaging only seven plants per square foot.

Zoysia works best when applied on bare earth with a smooth roller after drop seeding. Despite the grass's knack for keeping weeds at bay, it performs poorly when seeded into existing turf.

In other Diamond Shamrock news, Kurt Schwartau has been named product manager for the Agricultural Chemicals division. Prior to his promotion, Schwartau was a sales representative in the division's midwest region. He has been with Diamond Shamrock since 1979.

## Price cut announced At Ronstar G meeting.

A new, lower price for Chipco Ronstar G herbicide was announced by Rhone-Poulenc Chemical Co., Monmouth Junction, NJ, at its northeast distributor meeting held in Atlantic City, NJ.

New production efficiencies have permitted the average price to be reduced 12 to 14 percent below 1981 levels, according to Gerald Quinn, Ronstar G product manager. "Ronstar G can now effectively compete in a broad range of turf market," said Quinn. "Its ease of application and gentleness to a wide variety of turfgrasses and ornamentals make it one of the most cost effective preemergent herbicides available for the control of grassy weeds."

At the meeting Dr. Ralph Engel and Dr. Henry Indyk, both of Rutgers University-Cook College, presented results of their Ronstar G research. Continues on page 8



## **GCSAA** Conference Schedule

The 53rd International Golf Course Superintendents Association of America's Turfgrass Conference and Show in New Orleans, January 30 — February 5, is chock full of events, seminars and meetings. The following is Weeds Trees & Turf's guide to what is happening and when it is being held.

#### Monday, February 1

- 7:30 Prayer Meeting
- 9:00 Opening Session Keynote Address
- 10:30 Newsletter Editors' Reception
- 11:00 Press & Speakers' Luncheon
- 12:00 Spouses' Opening Luncheon
- 1:00 Water Symposium I
- 1:00 Distributor Show Review
- 2:30 Spouses' CPR
- 4:30 Meet The Candidates
- 5:30 Mardi Gras Reception

Tuesday, February 2

- 7:30 New Member Orientation 9:00 Ribbon Cutting Ceremony
- Show Officially Opens
- 9:30 Certification Committee Meeting
- 10:00 Spouses' Tours
- 11:00 Membership: Long-Range Planning Briefing
- 12:00 Voting Delegates' Luncheon
- 1:00 Water Symposium II
- 4:30 Membership: Long-Range Planning Briefing
- 6:00 EAC Dinner Meeting

Wednesday, February 3

- 7:30 President's Council Breakfast
- 9:00 USGA Green Section Program
- 9:00 Spouses' Program
- 10:30 Spouses' Program
- 12:00 Education Committee Luncheon Meeting
- 1:00 USGA Green Section continues
- 3:00 GCSAA Annual Meeting
- 6:00 President's Reception (By Invitation)
- Thursday, February 4
  - 7:30 Executive Committee Breakfast
- 9:00 E.F. Hutton
- 10:15 Thinking Superintendent
- 10:15 Course Drainage
- 11:00 Putting Green Speed
- 1:30 Communications
- 2:00 Show Officially Closes
- 2:45 Thinking Superintendent
- 2:45 Tree Management
- 2:45 Golf Cart Management
- 4:30 IRC Meeting
- 6:00 Banquet Reception
- 7:00 GCSAA Annual Banquet & Show

Friday, February 5 9:30 Superdome Tour

GCSAA publishes its Proceedings of the show each year. If you must miss the conference, write GCSAA for the 1982 Proceedings, GCSAA Director of Education, 1617 St. Andrews Drive, Lawrence, KS 66044. **News** from page 6

Engel noted that the three pound rate, especially when applied in late April, was effective, "Ronstar G is one of the most effective preemergent herbicides," said Engel. Indyk reported that previous complaints of poor results with Ronstar G were traced to improper technique of application. "It stands alone in the treatment of goosegrass," added Indyk.

## GOVERNMENT New lawn mower regulation approved

Yielding to an order from Congress, the Consumer Product Safety Commission has rewritten its regulation on power lawn mowers.

Due to the new regulation, the mower's engine will shut off whenever the operator is not holding the handle. This makes it virtually impossible for an operator to get his hand caught in the mower blade yet adds the inconvenience of restarting the engine repeatedly.

The Outdoor Power Equipment Institute lobbied for the new regulation over a 1979 version. The earlier version would have required the blade to stop without killing the engine when the operator lets go of the handle. OPEI noted that that version would have added \$60 to mower prices.

## TURF Grounds managers turn out for PGMS conference

The Pacific Northwest was the site for the 69th annual conference and trade show of the Professional Grounds Management Society and the more than 140 attendees made the most of both the Portland, OR locale and the conference program.

Many of the grounds managers attending played the host city for all it was worth—visiting Mt. St. Helens, the International Rose Test Gardens and Japanese Gardens and some of Portland's commercial nursery operations. While the number of attendees was down slightly from years past, the enthusiasm and involvement of this year's group more than compensated.

Seminars were divided into three sections—management, design and technical—and all were well-attended. Sandra Entrekin, Interact Resource and Development Center, and Dr. Roy Goss, Washington State University, proved to be two of the most popular speakers. Entrekin's talk on "From the *Continues on page 11* 

#### News from page 8

ground up—Design the management landscape" and Goss' seminars on turf grasses and turf nutrition were presented to packed auditoriums of over 110 grounds managers.

If anything, the Portland locale might have been too nice for a PGMS confer-



**Dr. Roy Goss,** Washington State University, conducted at seminar on new turfgrasses and their characteristics at the PGMS conference in Portland, OR.

ence. Some of the attendees told *WTT* that they were dismayed at the lack of problems that the Pacific Northwest seemed to be encountering. Next year's conference and trade show will be held in San Diego, CA, November 14-18. A record turnout is expected.

# New York conference draws 700 to Albany

Despite competition from hunting season, the PLCAA Show, and last minute problems with the conference hotel, the New York State Turfgrass Association Conference and Trade Show attracted nearly 700 turf managers to Albany's modern Empire State Plaza.

Educational sessions were divided into lawn care, golf, and athletic field management. General sessions covered turf and landscape topics and featured regional experts such as Cornell's Paine on weather forecasting, Rhode Island's Jagschitz on growth regulators, Rutger's Indyk on athletic field construction and maintenance, Cornell's Smiley on diseases, Bing on weeds, Petrovic on turf management, and Tashiro on insects.

# LANDSCAPE UPDATE

## ALCA Maintenance Symposium stresses salesmenship

Steve Brown, president of The Fortune Group, set the mood for ALCA's Maintenance Symposium with an upbeat presentation on effective management. "Management is the skill of attaining predetermined objectives," Brown noted. "The only thing that matters is results." With the stage set, the approximately 150 landscape contractors heard presentations on marketing potential, budgeting and forecasting, selling and equipment costing.

The marketing potential seminar was run by Ken and Tom Oyler, Oyler Brothers Co., Orlando, FL, and Ray Gustin, Gustin Gardens, Gaithersburg, MD. They discussed marketing techniques that have been successful in their businesses. Richard Reasoner, Dendron, Novato, CA, presented the seminar on how to forecast sales and budget accordingly. Phil Christian, division manager, ChemLawn Corp., conducted the equipment costing presentation. Christian provided the audience with various equations to ascertain their own equipment profitability.

Irv Dickson's (ChemLawn) seminar on "Successful Selling Methods" picked up where Brown left off. Dickson stressed that "the difference between success and failure in sales is having the right attitude." Dr. Robert Miller, vice president of group support services, ChemLawn, was the featured speaker at the luncheon. Miller, also a member of the National Coalition For A Reasonable 2,4-D Policy, spoke on the effects of chemicals in our world.

In other ALCA news, the association released its program for its 1982 Annual Meeting. The meeting will be held in Palm Springs, CA, January 25-29. The theme is "Winning in the 1980's" and Ed Foreman and Earlene Vining will kick off the meeting with presentations on "Successful Living" and "The Art of Successful Selling." Other noted speakers will be Jerry Lankenau, "How to Get the Government Off Your Back and On Your Side;" McNeil Stokes, "Contract Negotiating;" and David Bowen, "Cash Flow Management."

There will be an expanded trade exhibit and the 12th annual presentation of the Environmental Improvement Awards. A full program for the interior landscape industry is also planned.

## SC Turf and Equipment Show draws over 6,800

The Southern California Turf and Landscape Equipment Show held at the Orange County Fairgrounds, Costa Mesa, CA, was attended by more than 6,800 industry personnel and students. The show is the largest in the west and features more than 150 commercial exhibits and educational displays by seven community colleges and universities.

Fullerton College, Fullerton; Cal Poly University, Pomona; and Cuyammacco College, San Diego; placed first, second and third, respectively, as the three schools best training future leaders for the turfgrass industry. Several of the exhibits attracted quite a bit of attention from the attendees. B. Hayman Co., Sante Fe Springs, featured an antique power mower which still runs. Environmental Care's (Santa Ana) display featured an early model Ford pick-up truck. The hot air balloon advertising International Seed Co.'s Derby perennial ryegrass was one of the favorite attractions.

Additionally, the Southern California Turfgrass Council set plans for its 1982 Turf and Landscape Institute to be held in Anaheim, May 4-5. Seminars are planned for landscape, golf, water and energy, pest management and personnel management.

Continues on page 13

Specialty topics included drought and water management, ground water contamination, insecticide-related bird kill, small computers, and preventative pest management. Representatives from regional organizations chaired the sessions such as Frank Claps of the New York Turf and Landscape Association, Robert Miller of the Central New York Golf Course Superintendents Association, Gregory Davis of the Western New York Golf Course Superintendents Association, Robert Alonzi of the Metropolitan Golf Course Superintendents Association, and James Carnevale of the Nassau-Suffolk Landscape Gardeners Association. James Wyllie, vice president of the Golf Course Superintendents Association of America and probable 1982 president of GCSAA, spoke on new construction.

Richard McGovern, president of McGovern Sod Farms, was chairman of the conference and ironed out last minute problems with the Hilton which failed to get an occupancy permit in time for the show. Jerry Strein of Greenview Nursery, South Hempstead, took over the NYSTA presidency from Thomas Strain of Vestal Hills Country Club, Elmira. Bruce Shank, of Weeds Trees & Turf magazine, was elected to a three-year term on the board and appointed chairman of the long range planning committee.



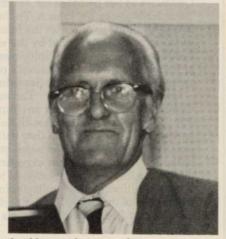
The Empire State Plaza provided an attractive and efficient location for a trade show. The 1982 will return to Albany and the conference hotel will be the nearby Hilton, which received its occupancy permit on the final day of the NYSTA show.

### TURFGRASS

## Youngner honored at West Coast show

Dr. Victor Youngner was named "Man of the Year" at the Southern California Turf and Equipment Exposition, Costa Mesa, CA.

Youngner, professor of plant science at the University of California, Riverside, is an internationally recognized turfgrass breeder, educator, and turfgrass scientist. Youngner is credited with developing the smog resistant hy-



brid bermudagrass cultivar, Santa Ana. He is currently developing and evaluating several improved zoysiagrass cultivars which show potential for being both energy and water efficient.

Continues on page 14





Circle No. 142 on Reader Inquiry Card

# GOVERNMENT

# EPA Officials on the Hot Seat

**UPDATE** 

On two successive days in October, the U.S. Senate Environment and Public Works Committee grilled the EPA administrator, Anne M. Gorsuch and her nominee for Assistant Administrator for Pesticides and Toxic Substances, Dr. John A. Todhunter. Mrs. Gorsuch was questioned severely about her plans for the future of EPA because the onboard EPA bureaucracy estimates that by the end of fiscal year 1983, there will be less than half of the 1981 employment level (around 10,000). She was also grilled about the Administration's plan for rewriting the Clean Air Act, failure to do anything about Superfund, and the low morale in EPA.

On the next day at Dr. Todhunter's nomination hearings, the Committee, with help from environmental organizations, unloaded on him. They were critical of health risk decisions made during his consultant status with EPA since they differed widely from previous agency policy. Of note were the decisions on formaldehyde and the controversy within EPA on the human exposure levels due to the use of ethylene dibromide (EDB) for fumigation of food crops in the Medfly quarantine areas of California. His public disclosure earlier this year about the EPA suspension of the uses of 2,4,5-T and silvex on insufficient evidence also came under fire. However, he was easily approved by the Committee and the full Senate.

## More Pesticides for the Nursery Industry

A concerted effort by the American Association of Nurserymen, the National Forest Products Association and the Society of American Florists has given the nursery industry quicker access to new and effective pesticides. The cost of acquiring registration data has been so great that a manufacturer often did not register low volume uses until years after a chemical was registered for a major agricultural crop.

The three organizations made their problem known at the 1981 Congressional Federal Insecticide, Fungicide and Rodenticide Act (FIFRA) oversight hearings. They requested the insertion of a new definition in FIFRA that would make "applying a pesticide, registered for use on a food crop, to any non-food or non-feed nursery crop against any target pest specified on the labeling, unless such use is specifically prohibited on the labeling" not inconsistent with its labeling. In subsequent meetings with the House Agricultural Committee staff and EPA, a method was found to resolve the nurserymen's problem without making a change in the Act. Under existing statutory authorities, EPA proposed that the following uses are not inconsistent with labeling: (1) a pesticide registered for use on a specific ornamental plant can be used on all ornamental plants; (2) a pesticide registered for use in greenhouses can be used on all non-food plants grown in greenhouses; and (3) general or unclassified use pesticides registered for use on food crops may be used on non-food or non-feed nursery sites. In all three all label directions, precautions, and restrictions must be followed.

This new policy would make about 85% of the registered pesticides available to the nurserymen.

## **New Soil and Water Conservation Ethic**

The U.S. Department of Agriculture is ready to embark on a new soil and water conservation program. The programs that evolved during the last 45 years assumed that farmers, ranchers and other resource users were motivated to practice sound conservation methods for financial reasons. Today, other factors in agriculture play a significant part and the USDA has decided to shift away from random 'first-come, first served' style of practice selection to one of priority designations worked out with state and county organizations. In order, these priorities are: (1) reduce soil erosion, (2) reduce flood damage in small, upstream waterways, (3) conserve water and enhance water quality, (4) improve fish and wildlife habitat and (5) increase the use of organic waste.

## News from page 13

### GOLF

# Musser tournament raises over \$2000

Over \$2000 was raised for turf research through the Musser International Turfgrass Foundation at the Eighth Annual Oregon Musser Tournament.

Winner of the 18 hole tournament was a Salem team of Ray Anderson, Bob Renaud, Bill Burgher and Ed Radigan who won tickets for a free flight over Mt. St. Helens. Tualatin Country Club donated free green fees and the Tee-2-Green Corp. sponsored the evening banquet.

With 64 players entered this year, two women joined the fray for the first time.

## Prusa takes on GCSAA training job

The new education director of the Golf Course Superintendents Association of America represents both the old and the new for superintendents.

Having grown up on Aquamarine Golf Club in Avon Lake. OH, where his father is superintendent, he was exposed to the methods of the 50's and 60's. Unlike others growing up in this rather rebellious time, he was captivated by his father's occupation.

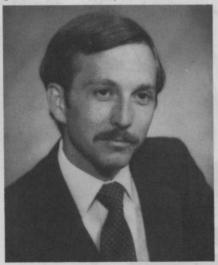
After a tour in the Navy, he pursued a horticulture degree from Orange Coast Community College in Costa Mesa, CA., and California State Polytechnic Institute in Pomona. GCSAA recognized Prusa as a student at Cal Poly with a scholarship. He was Kent Kurtz's technician for turf research. He graduated with honors in 1975 with a degree in turf management and ornamental horticulture.

After serving as superintendent at China Lake Golf Course in California, he moved to Pasatiempo, a course designed in 1927 by Allistair MacKenzie, often called the father of golf course architecture. MacKenzie also designed Cypress Point Golf Course in Monterey, CA, and Augusta National in Atlanta, GA, with Bobby Jones. Prusa took the job as superintendent at the beginning of the severe drought. He had to justify skyrocketing irrigation water bills and at the same time help the members adjust to course changes caused by water reduction. His dilemma was reported at the GCSAA Convention in St. Louis in 1979.

Prusa has always expressed an interest in the club management aspects of golf and now holds the title of Superintendent of Buildings and Grounds and acting General Manager of Pasa-Continues on page 16

### News from page 14

tiempo. He has always applied computer and audio/visual technology to his golf course work. The Club Manager's Association recognized his progressive spirit and awarded a scholarship to Prusa to study for an MBA degree at the University of Santa Clara.



**Jim Prusa** 

Prusa has always been active in group and community projects as president of the Cal Poly Horticultural Alumni Association, member of the California Farm Bureau and the Santa Cruz Chamber of Commerce, as well as the Golf Course Superintendents Associations of Northern and Southern California. He has been a member of the GCSAA Education Committee and served as secretary of the Southern California Turfgrass Council.

Kurtz describes Prusa as progressive, creative, confident, poised, articulate, and not afraid to rock the boat. "He has been very active in review of the pest control industry standards in California and outspoken on misuses of pesticides. He fought for the continued use of 2,4-D in Santa Cruz County and won.

"Jim recently built a tee on top of his maintenance building," Kurtz said, "so the building was hidden from the clubhouse and the tee position more challenging."

Jim's brother John is a turf management graduate from Ohio State University and is the New York area manager of Lawnmark Associates, a lawn care company. His wife, Karen is working on her CPA. Jim gives an annual scholarship to women in nursery management at Cal Poly in memory of his first wife, Patricia, who died following a hiking accident. To summarize, Jim knows the old ways and the new ways, the Midwest and the West ways, and strongly believes that the superintendent should build on his base of expertise into computers, design updating, and even some club management. It may have been many of his ideas that helped GCSAA realize that its educational program had to grow.

#### LAWN CARE

## Over 800 attend PLCAA convention

A rousing success may be the only way to describe this year's Professional Lawn Care Association of America Second Annual Convention and Trade Show.

Over 800 people took part in the show, held this year in Louisville, KY. Exhibit space at the trade show more than doubled from last year to 144 booths. With the increased manufacturer support and the upscale convention facilities (carpeting was added to the exhibit floor), the PLCAA show has proved to be one of the major events in the green industry in only its second year.

Continues on page 18

**Finally, An Aid For Teaching Turfgrass** 

Superintendents, Contractors, Lawn Care Managers, New, On-the-Job Reference. The Turf Managers' Handbook is a comprehensive, organized approach to turfgrass science and care. It has been designed and written by leading turf specialists from Purdue, Dr. William Daniel and Dr. Ray Freeborg, for on-the-job reference and as a text for students. The book contains 150 illustrations and 96 color photographs. Data includes 240 tables and forms. Included are

chemical applications, and extensive metric-imperial conversion. Business and technical aspects of turfgrass management are covered in this 424-page book. Planning, purchasing, hiring, construction, and plant selection are put together for easy on-the-job reference. Markets covered include lawn care, sod production, golf course management, cemeteries, athletic fields, and low maintenance areas. If it concerns turf, it's in the Turf Managers' Handbook.

 <u>I la la Gel Sil</u>	Haildbook
Ordering Information	Signature
Please send copies of the hardback (\$23.95* ea.)	Name (Print)
*Please add \$2.50 per order, and if ordering multiple	Address
copies, also add 25¢ per additional copy for postage and handling costs.	CityStateZip
A check or money order for is enclosed.	Send to: Book Sales Harcourt Brace Jovanovich Publications
I understand that delivery may take six to eight weeks. Quantity and bookstore rates available upon request.	One East First Street Duluth, MN 55802 WTT 12

specifications for rootzones,

employment, calculations for

Attendees were treated to three days of informative seminars, workshops and exhibits. The two-hour evening workshops proved to be a well-appreciated innovation of the show. At the workshops, lawn care operators had the opportunity to fire questions at speakers who presented seminars earlier in the day. Both the seminars and workshops were very well-attended.

The show program got off on an inspired note with the keynote address delivered by Ralph Lewis Jr., vice president-coordinator corporate communications, Gulf Oil Corp., Pittsburgh, PA. In a saber-rattling speech, Lewis pointed out the public's lack of knowledge of energy policy and stressed the importance of the relationship of energy, politics and global events.

The first day seminars centered around technical matters such as ornamentals, toxic waste, and lawn care equipment. Business seminars on office management, financial statements, accounting and employee discharge and compensation were the topics of the second day. Updates on herbicides, pesticides, pathology and 2.4-D were also presented.

The active participation of the lawn care operators during the educational program carried over into the trade show, according to many exhibitors. A steady flow of attendee traffic was noticeable during all of the exhibit hours. Additionally, many attendees were not just browsers but stopped at the booths to inquire about the products exhibited.

One of the highlights of the show was a presentation honoring Jerry Faulring (Hydro-Lawn Corp., Gaithersburg, MD) for his hard work and



Jerry Faulring (left) hands PLCAA reigns to Marty Erbaugh.

leadership in serving as PLCAA president for the association's first two years. The board of directors was also voted in, including 1982 president J. Martin Erbaugh (The Lawnmark Corp., Pennisula, PA).

The 1982 PLCAA Convention and Trade Show will be held in Indianapolis, IN, November 14-16.

### ARBORICULTURE

## Johnson named vice president at Davey Tree

Edward Johnson has been named vice president of field services for the Davey Tree Expert Co., Kent, OH. Johnson will work closely with senior vice president of field services Bert Stamp who is planning to retire this month.

In his new position, Johnson will have overall corporate responsibility for personnel, safety and equipment for total company operations.



Prior to his appointment, Johnson served as operations coordinator in the tree care department. He also served as manager of Parr and Hanson, a Davey subsidiary in Hicksville, NY. He has 26 years of experience in arboriculture and is past president of the New York Arborists Association.

## EQUIPMENT Cal Poly equipment program marks 3rd year

California State Polytechnic University, Pomona, CA, celebrated the third year of turfgrass equipment evaluation program.

The turfgrass equipment is consigned to the university by Clarence McMicken, president of B. Hayman Co., Santa Fe Springs, CA (a turfgrass equipment distributor). Some of the companies involved in the program include Jacobsen, Smithco, National, and OMC-Cushman.

The equipment is shipped crated to the university where the students set it up. Once the equipment is assembled and checked out by the students and Dr. Kent Kurtz, several turfgrass areas are assigned for the evaluation. Oncampus areas are agreed upon by Dr. Kurtz and Wayne Smith, supervisor of landscape services for the university. Areas of campus are also utilized such as little league baseball fields and youth soccer fields in neighboring communities. This segment of the program works to the benefit of not only the students, but also the volunteer organization who need assistance with turfgrass care.

The cooperating parent manufacturers have been pleased with the arrangement because it exposes the future turfgrass managers to their equipment. Several design modifications have resulted from this program since the students are critical of problems that may arise from using a particular piece of equipment.

#### TURFGRASS

## NCTC members request research projects

Following a survey of its membership, the Northern California Turfgrass Council Research Committee has identified five areas in which research is desired. These areas are: a mowing height comparison of the most frequently used cultivars of Kentucky bluegrass, perennial ryegrass and fescues under normal institutional fertilizer and watering practices; a cost comparison of seeded versus sodded turf and the development of a costbenefit ratio per unit area; the alleopathic effects of various turfgrasses such as perennial ryegrass and tall fescue; various aspects of turfgrass irrigation; and the selection and/or development of a fine leaf, slow-growing, and non-nuisance Kikuyugrass.

#### TURF

## Lakeshore promotes Winland to product manager

Joe Winland has been named product manager for turf chemicals at Lakeshore Equipment & Supply Co., Elyria, OH.

Prior to his promotion, Winland served as plant manager and manager of inside sales for Lakeshore. His duties included formulating and technical support. Winland joined Lakeshore in 1976 following a career as a golf course superintendent at Pine Hills Golf Course Hinckley, OH, and Saw Mill Creek Golf Course, Huron, OH, where he was involved in the construction of the course.

As product manager of turf chemicals, Winland will continue his technical support functions, but will also become involved in product development and Environmental Protection Agency registrations.



## LANDSCAPE IBDU fertilizer used to revegetate Mt. St. Helens

In an attempt to revegetate Mt. St. Helens, the Washington State Soil Conservation Service has begun applying non-bacteria dependent fertilizer.

The fertilizer, IBDU, is a slowrelease nitrogen fertilizer that does not depend on soil bacteria to work. Efforts to revegetate the area with conventional fertilizers have been unsuccessful. According to SCS sources, there apparently is not sufficient bacteria in the volcanic debris to activate conventional fertilizers.

IBDU was applied along the banks of the Toutle and Cowlitz rivers which were ravaged by lava and mudflows. Approximately 70 tons of IBDU was used to treat 1000 acres. For the past 16 months the SCS has been involved with revegetation attempts to control erosion on the 200,000 acres in the erosion zone caused by the blast. The SCS estimates 380 tons of soil per acre per year will be lost to erosion on the land compared to the national average of 4.2 tons of soil erosion on disturbed forest land.

The SCS expects IBDU to remain in the soil for six months after the initial application, which should allow the vegetation to develop sufficient root systems to control erosion. IBDU is marketed by PAR EX Professional Products division of Estech.



