The Pennfine Challenge.

Name another winter grass that delivers all these advantages.

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Texture. University trial data indicates that Pennfine has the finest texture of any perennial ryegrass.

Purity. All Pennfine seed is certified. Growers are paid a premium to deliver quality seed.

Ruggedness. Pennfine retains the ruggedness of the old ryegrasses, takes traffic well and repairs easily.

You're invited to compare Pennfine Perennial Ryegrass, benefit for benefit, with any other grass you can use for winter overseeding.

We're betting you won't find anything that measures up to Pennfine.

In five years of rapidly-expanding use, Pennfine has become the new standard for winter overseeding in the South. Hundreds of superintendents have put it to the test; we've yet to hear of a real weakness.

Other breeders have tried to duplicate Pennfine's qualities;

Smooth putting.

When moved to "green height", Pennfine produces extra tillers for a thick, smooth putting surface.

Play-tested. Pennfine has been used on hundreds of golf courses as well as parks, cemeteries and athletic fields.

Spring transition. Pennfine is noncompetitive, makes a smooth transition to bermudagrass in the Spring.

we've yet to see another variety that can match Pennfine's performance record. Of course, you're the ultimate judge of what goes on your course. All we ask is this. Before you select a winter grass, compare it—benefit for benefit—with Pennfine. For more information, write: Pennfine, P.O. Box 923, Minneapolis, MN 55440.

Pennfine PERENNIAL RYEGRASS

If it has a weakness, nobody's found it yet.

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WEEDSTREESETURE.

12 EPA: Understanding Enforcement — Policies for pesticide industry violations are pretty well established, but the Agency has a lot more work to do when it comes to user violations.

13 OSHA: A Businessman's Guide — Attorney and former Labor Relations Counsel for the U.S. Chamber of Commerce Tony Obadal gives some practical advice on dealing with the enigma.

24 Fighting Dollar Spot — Tests conducted at several northeast golf courses indicate combination products can be most effective in halting this tough disease.

29 Beating Mole Cricket — When the new superintendent took over the courses on Jekyll Island in Georgia he found a severe mole cricket infestation. Here's what he did about it.

32 The Horticultural Consultant in Court — Many consultants have damaged themselves in court because they didn't do their homework. Don't let this happen to you.

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ON THE COVER: If you don't understand EPA and OSHA enforcement policies you could wind up in court. See related stories on pages 12 and 13.

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Member, American Business Press, Business Publications Audit





Single Copy Price: \$1.00 for current and all back issues. Foreign \$1.50. Subscription Rates: WEEDS TREES AND TURF is mailed free, within the U.S. and possessions and Canada, to qualified persons engaged in the vegetation care industry and related fields in controlled circulation categories. Non-qualified subscriptions in the U.S. and Canada are \$10.00 per year; other countries, \$12.00 per year. Controlled circulation postage paid at Cleveland, Ohio 44101.

APRIL 1977, Vol. 16, No. 2

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APRIL 1977/WEEDS TREES & TURF 3

...the tough one, for total vegetation control?





- Less pounds last longer
- Gets most tough weeds and most brush others leave behind
- Gets most tenacious vines, brambles and woody plants
- Is remarkably resistant to leaching and lateral movement

Acceptability!

For the past several years, SPIKE has been tested in actual field situations with commercial equipment. When applied in accordance with label directions, SPIKE will result in a high level of long lasting total vegetation control.

Test plot demonstrates dramatic result of single application of SPIKE.



Durability?

Commercial field use has demonstrated that at recommended application rates SPIKE remains effective longer than most other products tested, and permits lower application rates in succeeding years.

Long-term control prevents regrowth for extended periods of time.



Missouri test plot treated with SPIKE shows residual control 2 years later!

Capability!

Five years of development and more than three years of extensive nationwide on-site testing in non-crop areas have proven SPIKE highly effective in the control of a wide spectrum of vegetation, including many of the so-called hard-to-control species. SPIKE effectively controls many tough perennials, as well as many woody brush and vine-type species that escape other control products.



Dead common mullein along right-of-way is a dramatic example of SPIKE's effectiveness on tough-to-control species.



Commercially-applied test plot demonstrates SPIKE's ability to eliminate persistent varieties such as Bouncing Bet.

Suitability!

Because of SPIKE's features

- · Less pounds last longer
- · Gets most tough to control weeds and brush
- Gets most tenacious woody vines and brambles
 - Is remarkably resistant to leaching and lateral movement

. . SPIKE belongs in your total vegetation program.

"Before" and "after" views of the same test plot clearly demonstrate SPIKE's ability to control brush and woody vegetation.



Dependability!

... that's what all of SPIKE'S abilities add up to. SPIKE is a proven total vegetation control product that is truly tough on weeds! What's your tough vegetation control problem? Whatever it is, consider SPIKE an essential weapon in your chemical arsenal. Contact your ELANCO distributor for full details on SPIKE . . . the tough one for total vegetation control!

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TO OUR READERS

While in Washington gathering material for our EPA story (see page 12), I spoke with several EPA officials including Stanley W. Legro, EPA Assistant Administrator for Enforcement.

Mr. Legro had recently spoken at the Arborists' National Meeting and, after a brief discussion, agreed his thoughts, presented there, were applicable to all of us involved in the Green Industries.

In fairness, we turn over our editorial space this month to Mr. Legro who has graciously prepared these thoughts for us on where the EPA enforcement branch and the Green Industries stand today.

You are environmentalists in the inest sense. Proper use of pesticides and fungicides is an environmental plus in that it helps to protect and preserve trees and other greenery which are of vital importance to maintaining a high quality environment, particularly in our urbanized areas.

Benefits of mutual cooperation

There are great benefits to be obtained from our mutual cooperation. This can help us to avoid unnecessary controls and to reduce regulation. By having effective requirements for training for use of dangerous pesticides under the certified applicator program, we can help to insure maximum availability of pesticides to you and to others who are qualified to use them. Many of you are leading citizens in your communities and take pride in the professional standards of your work; EPA wants to cooperate with you to regulate those who do not hold the same high standards, to keep your profession from unfairly getting a bad name and to avoid unnecessary regulation of the many of you who are well qualified to prevent abuses by those who are not.

A brief look at the structure of FIFRA

In simple terms, the Agency's program to control the use of pesticides and fungicides involves three elements: determination that a pesticide can be sold; a determination of the contents for the label; and insuring that the pesticide is used in accordance with the label.

The registration process reviews the efficacy and benefits to be obtained and balances those against the risk of harm. The risk assessment includes toxicity, use patterns and controls, and persistence of the pesticide. After doing a risk vs. benefit analysis, a decision is made either that the pesticide cannot be registered at all or that it can be registered for specific target pests under specified conditions. If it is registered, it can be registered for restricted use only by certified applicators, or it can be registered for general use by the public. A label must be placed on each pesticide container describing the contents and the manner in which it must be used.

The responsibility of our enforcement programs, carried out through our own small staff of consumer safety officers and in cooperation with state officials, consists of insuring that unregistered pesticides are not made or used and that registered pesticides are formulated and labeled in accordance with their registration and used in accordance with the label. Where a mususe occurs, a careful evaluation by our Pesticides Misuse Review Committee is conducted before determining what action to take.

Pesticide Enforcement Policy Statements (PEPS) and guidance

In close cooperation with state officials and other interested persons, we have prepared PEPS and Guidance to enable us to achieve the goals of the Act while at the same

time avoiding unnecessary regulatory burdens which do not produce positive results. For example, among the PEPS we have issued is PEPS No. 5, providing for use of pesticides against nontarget pests in agricultural and other nonstructural pest control areas. This PEPS would enable you under the circumstances described in the PEPS, to use a pesticide under the appropriate circumstances for pests not listed as target pests on the label where that would be environmentally sound and avoid undue cost and inconvenience. Another example is PEPS No. 6 dealing with service containers in the structural pest control industry. You should read each PEPS closely to determine the exact conditions. Copies are available to you.

Future outlook

We are considering the possibility of either expanding PEPS No. 6 or preparing a new PEPS to provide for use and labeling of service containers in your industry. We would look forward to your suggestions and cooperation in this regard as well as with respect to other suggestions you may have as to areas where PEPS are appropriate. In another area of future interest to you, because of policy reasons and resource constraints, we plan to conduct use inspections in only a very small number of cases. In setting our priorities of whom to inspect, we will be looking at voluntary submissions that those in the industry make regarding their training programs. Obviously it would not make sense for us to spend many resources inspecting those who have adequate training programs. Accordingly, I believe that leaders in your industry can help us to determine what constitute adequate training programs. We can work together in this regard to ensure environmental quality of pesticide use and to direct use inspections where they are most needed.

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If you're looking down yellow or off color fairways, take a walk on them with your local USS Vertagreen distributor as soon as possible. He'll show you how USS Tournament Plus 19-5-9 can be the answer to your problems. This great product, developed especially for fairways, will release 48% of its nitrogen content in a sustained, uniform manner because of the urea-formaldehyde

content. And that deep, dark green color will come from the sulfate of potash.

It also contains guaranteed amounts of secondary and micronutrients as well as chelated iron for uniform growth. USS Tournament Plus is another reason we say "see the best, for the best"—and that's your local Vertagreen distributor. He'll put the green back in your fairways.

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Jovernment News

Under a \$91,773 trust fund cooperative agreement with the Florida Department of Natural Resources, the U.S.D.A. will evaluate new chemicals and techniques to

control Hydrilla and other aquatic weeds.

Hydrilla verticillata Royle, a pest weed widespread in Florida and beginning to appear in other sections of the U.S., is a noxious submerged weed that chokes ponds, lakes, streams, and canals. It interferes with drainage for flood control, the use of water for irrigated agriculture, and it seriously restricts the use of water for navigation, wildlife, and recreation.

James Varley & Sons Inc., a St. Louis, Mo. firm, was slapped with a \$7,500 civil penalty by EPA in a Region VII pesticide enforcement action. EPA alleged several products the company was distributing--Varco Restaurant Disinfectant and Sanitizer, Creme Cote Multi-Purpose Cleaner, and Mint Odor Wincide Disinfectantwere misbranded.

In another pesticide enforcement action, EPA assessed a \$480 penalty against Parkway Research Corp., of Miami, Fla., for shipping Instant Kill and Grass Tox. The products were not registered, EPA officials claimed.

According to the findings of researchers at Ohio State University, Department of Plant Pathology, only 19 percent of ornamental plant diseases can be treated with products currently registered. Of 296 ornamental plant diseases, 23 percent of the registrations for the diseases were available "through some sort of grouped or lumped labeling that does not specifically mention the host, the pathogen, or both. Thirty-nine percent of the hosts listed are not specifically mentioned on any of the 681 registrations for any of the 296 diseases listed."

The study concluded that pesticide manufacturers need the grouped labeling method to avoid liabilities and prohibitive costs inherent in developing specialty products. The researchers urged public subsidy insurance programs to help manufacturers.

The U.S.D.A. has moved to give plant seed developers filing for patent-type protection in a foreign country an additional year to file for parent protection in the United States.

Amendments to the Plant Variety Protection Act will also make regulations more uniform for abandoned or lapsed applications and eliminate delays caused by collecting seed samples and fees separately. The five-year grace period granted to foreign developers to file for parent protection in the U.S. is in keeping with policies of other countries who administer "grow out" tests to evaluate new plant varieties.

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Conservation cover plants released

Plant breeders of the Agricultural Experiment Station at the Pennsylvania State University have released Lathco flatpea and Tioga deertongue grass as conservation cover plants. Latho flatpea is useful on old logging roads, transmission lines and pipelines, roadbanks and mine spoils.

Tioga deertongue grass is highly tolerant of acid soils and toxicity from aluminum and manganese. Its greatest use, according to the breeders, will be to help revegetate acid spoil banks and refuse banks.

Park system OK'd for Santa Monica

A master plan for the development of a 25,000-acre park system in the Santa Monica Mountains has been approved and construction is expected to begin within a year.

Parks will be built at Point Mugu, Malibu Creek and Topanga, and will incorporate many new features. Among these are a model farm, an American Indian cultural center, and 108 miles of hiking trails.

Parking areas, hotels, campgrounds and picnic areas will be placed on the fringes of each park so that most of the land can remain in a natural state.

USDA certifies new Lofts grasses

Lofts Pedigreed Seed, Inc. recently announced receiving Plant Protection Certificates for both their Yorktown and Diplomat Perennial Ryegrasses.

It takes from two to five years to get a certificate from the U.S.D.A., during which time it must be proven that the seed is both new and superior.

Dr. Fred Ledeboer, director of

research for the company, said that Yorktown produces grass distinguished by dark green color. It produces excellent turf when grown in a cold, humid environment and is resistant to leaf blights, he said.

Diplomat produces grass that has fine texture and a medium green color. Improved mowability and good summer performance are characteristics of Diplomat, he said.

Urban forestry works available

A compilation of the works of arboriculturists and urban forestry scientists from all over the world has been published by the University of Toronto Press.

Entitled, "Trees and Forests for Human Settlements", the paper-back edition contains the full texts of 38 papers presented during symposia at the United Nations Habitat Forum, Vancouver, British Columbia, and at the 16th International Union of Forestry Research Organization, World Congress, Oslo, Norway.

The book is available from the Centre for Urban Forestry Studies, University of Toronto, 203 College Street, Toronto, Ontario, Canada M5S 1A1. Copies are \$5.00.

Perlite Institute offers data sheet

Perlite Institute, Inc. has published a two-page data sheet titled "Horticultural Perlite for Successful Planting."

Covered in the new publication is a description, availability and properties of horticultural perlite. Also detailed are propagation, all purpose and soil amendment grades of horticultural perlite for rooting cuttings, potting and for lawn, flower and vegetable growing applications. Weight comparisons for loam and perlite-peat moss mixtures are included.

Copies of Bulletin HP-77, "Horticultural Perlite for Successful Planting," may be obtained from Perlite Institute, Inc., 45 West 45 Street, New York, NY 10036.

Brouwer expands Canadian plant

Brouwer Turf Equipment Limited, with a factory and offices located on a 50-acre site near Toronto, Canada, has completed a 38,000 sq. ft. expansion to this plant.

Brouwer's entry into the reel mower production and increased demand for harvesting equipment created the need for the additional space. The plant was opened in 1974 solely for the production of the company's sod harvester.

5000 attend GCSAA show

A record 5,200 people attended the 48th International Turfgrass Conference and Show in Portland, OR. sponsored by the GCSAA in February.

More than 1,000 GCSAA members were present, according to early tabulations.

The two attractions were the educational sessions and the displays of 166 exhibitors.

Fifty-seven experts in turf management and various aspects of research, equipment, chemicals and management conducted more than 39 hours of actual educational experiences.

Four preconference seminars attracted 126 superintendent-students and 17 others took the rigorous sixhour certification examination. Of those, 13 passed all portions of the exam becoming Certified Golf Course Superintendents. One is Thomas Malehorn, 23, golf course superintendent at Red Lion (PA) Country Club, the youngest superintendent ever certified.

People on the Move

Erwin B. Anhaeuser has been appointed manager of manufacturing operations for FMC Corp. sweeper division. He has a B.S. degree in economics from Neuwied School of Business in Nuwied, Germany.

Brian A. Gittings has joined ICI United States Inc. as a product marketing specialist. In his new position, Gittings will be responsible for marketing and sales of methanol from the agricultural division of Imperial Chemical Industries Ltd. and various products from the ICI petrochemicals division. He received a B.A. degree from Newcastle University, England.

Dr. James Beard, professor of turfgrass physiology at Texas A&M university, participated in a threeweek lecture tour in Australia as a guest of the Australia Turfgrass Industry. Beard also toured New Zealand for a week.

Ted Zeller has been appointed president of Target Chemical Co. Formerly the general manager of the company, Zeller is a licensed pest control advisor in seven licensed categories. He resides with his wife and three children in Villa Park, CA.

Renee Kierney has joined Melnor Industries as public relation administrator. She will be responsible for all phases of public relations and sales promotion activities. Kierney was formerly a senior copy writer with McGraw-Hill and also worked as a promotional writer for the New York Times. She is a graduate of the University of Berlin.

Ciba-Geigy Corp. has transferrred Smyth Van Sickle, a senior



Lauren Collins



Renee Kierney



Ted Zeller

market research analyst, to an Ohio sales territory for its agricultural division. Van Sickle is an agricultural science graduate of Ohio State University.

Dr. Elias Fereres has been appointed as a research specialist at the newly formed extension irrigation branch of the University of California, Davis. He will develop research programs in irrigation efficiency, plant-soil-water relationships and irrigation engineering. Fereres studied agronomy and engineering at the University of Madrid and received a Ph.D. in ecology at UC, Davis.

Diamond Shamrock Corp., agricultural chemicals division, announced new territories for three of its sales specialists. Nathaniel Brooks will now cover Kansas, Nebraska and Colorado, Howard A. Kohrmann will represent northeast Texas and southwest Louisiana. Braden J. Surrena is responsible for Michigan and Indiana.

Lauren W. Collins was recently appointed to the Engineering and Research Center, carburetor division, Walbro. Corp. Collins has an M.S. in mechanican engineering from the University of Toledo.

John E. Davies has been named general manager of the agricultural division of Rhodia Inc. Formerly vice president for marketing at Amchem Products Inc., Davies holds a B.S. degree in pharmacy from the University of Iowa and an M.B.A. from Pace University.

James T. Paul has joined Elanco Products Co. as an agricultural chemicals sales representative in the Illinois area.