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WTT-6

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WEEDS TREES & TURF®

June 1975, Vol. 14, No. 6

10 Practical Ideas for Bluegrass Health — Fusarium blight disease has become a major problem in the Northeast especially on bluegrasses. But several superintendents throughout this area have achieved successful control through timely applications of fungicide.

16 THE SEED LABEL — The turfgrass seed label appears to be simple and straight-forward. But it implies many things and fails to clarify others. Anyone encountering frequent plantings should be familiar enough with the label to analyze all possible unseen consequences.

18 Measuring the Nutritive Values of Gypsum — Increasing turfgrass root activity has long been a goal of most growers. Dr. Guy Terwari, U.S. Gypsum Co., claims gypsum not only enhances root proliferation and penetration but also provides a source of calcium and sulfur.

22 Aquatic Plant Management — It's no secret that this country has an extensive aquatic weed problem. Botanist William Rushing feels we should think in terms of long range management of the aquatic system and not just immediate control of one facet. Rushing suggests an arsenal of aquatic plant management tools — biological, mechanical, chemical and others.

26 The White Amur Controversy — The search for biological control organisms for aquatic plants is on the increase. Probably the most heatedly-debated bio-control agent is the white amur. Alva Burkhalter takes a state-by-state look at amur research — past, present and proposed.

40 Sewage Sod Saves Time — Henry Decker, Buckeye Bluegrass Farms, has discovered a sod production short cut using sewage sludge or other waste material as a growing medium. Decker claims he can cut growing time, shipping weight and labor costs.

Editorial	8	Commercial Sod Industry	40
Government News • Business	14	Meeting Dates	43
Industry News and Newsmakers ...	30	Classifieds	48
People on the Move	38	Advertisers	48
New Products	39	Trimnings	49

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THE COVER — Adequate roadside maintenance can only be achieved with well-maintained equipment. With this in mind, WEEDS TREES AND TURF's July, August and September issues will contain feature articles on repair, maintenance, and proper handling of new and old equipment.

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Editorial

Later this year the 5th anniversary of the Occupational Safety and Health Act of 1970 becomes history. All is not sweetness and light, but the crucial period of government harassment relating to the Act is behind the industry.

This isn't to say the Act is to be taken lightly. Rather, the enforcement approach has changed greatly. Today, the OSHA arm of government is talking voluntary compliance. A businessman, large or small, in some areas may request a trained OSHA consultant to visit his workplace, explain which OSHA standards apply, and point out where violations exist.

Under no circumstances — according to John H. Stender, assistant secretary of labor for OSHA in a recent speech — will records of the visit be used to trigger an OSHA inspection. This program is a cooperative venture with states which accept the program and funding is to be shared equally by the state and the federal agency.

The inspection or consulting program is a part of the voluntary compliance route now being pushed by OSHA. Stender reports that OSHA is putting together a variety of booklets, checklists,

and companion literature on standards to help employers, especially small employers. The idea is that they understand OSHA, develop their own safety and health programs, and conduct self-inspections of their own businesses.

Stender believes that self-inspection is an important and logical part of voluntary compliance. Employers, he says, know their own workplaces best and should be the first to know what the hazards are.

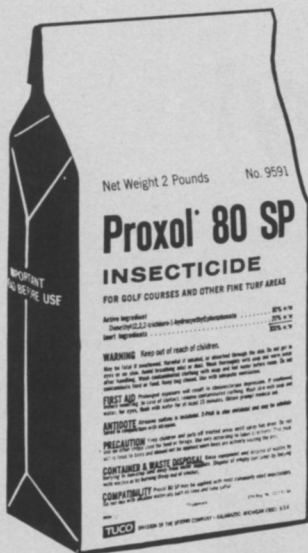
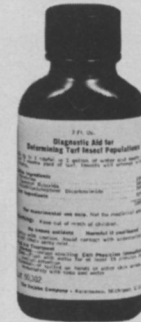
He further restates the position of OSHA as a regulatory agency, but recognizes that an effective enforcement program must be backed by an equally effective program of voluntary compliance. OSHA, he points out, cannot police five million workplaces which cover 60 million employees. This is why, he says, that the thrust of the agency has been directed toward reshaping a program directed at helping employers comply voluntarily.

In citing plus points for the agency, Stender said that work-related fatalities and illnesses dropped 7 percent between 1972 and '73. Work related deaths for all industries (including some not covered by OSHA) were down in 1974 by 5 percent.

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INTERNATIONAL HARVESTER

Fusarium Blight Control

Practical Ideas for Bluegrass Health

PRACTICAL APPROACHES and experience in the control of Fusarium blight disease are being reported in the Northeast in an area where this disease has become a major problem, especially on blue grasses such as Merion. The experience includes several years of trials on Pennsylvania golf courses that have been hit hard by a disease which thrives in summer when temperatures are constantly above 70 degrees.

Golf course superintendents have faced difficult disease problems with Merion, despite the fact that it generally holds up better than bent grass and does not need as much water or fertilizer. Also Merion can be cut at 1" — not ½" as on bent grass. But in spite of these maintenance advantages and the enthusiasm of golfers for Merion, the appearance of Fusarium blight several years ago threatened a number of well-known courses where Merion Blue was the dominant grass. The disease has customarily appeared about half a dozen years after the turf was well established, and control seemed to be elusive.

Now, it's clear the disease can be stopped. Several superintendents of leading golf courses in southeastern Pennsylvania have achieved practical control in '73 and '74. They expect to continue their control programs for the coming season, as well. The programs are based on timely applications of fungicide. Following are the experiences of three.

Moselem Springs Success

Bare spots from mid-June on was the Fusarium blight challenge faced several years ago by superin-

tendent Byron Knoll at Moselem Springs Golf Club at Fleetwood, Pa. Wilting grass turned brown on all of the fairways and small one-foot spots quickly coalesced into patches measuring six to eight feet in diameter. The disease first appeared on the course in 1970 and was rampant two years later. In June, 1973, Dr. Herbert Cole and his staff from Penn State and Knoll established a key series of 30 trials on a fairway close to the clubhouse. Their aim was to measure the control potential of alternate materials and to demonstrate what could be done to keep a fairway in good condition with disease-control compounds that would involve added maintenance cost — yet insure better turf.

"We used a show-and-tell technique to demonstrate how a fungicide can control disease," says Knoll. "It was easy for our membership to see how Fusarium blight was stopped. The disease marched right up to the edge of the plots. We certainly developed a lot of interest in the control program."

Moselem Springs had been developed with a 70 to 90 percent stand of Merion and with increasingly heavy disease pressure it provided almost a classic example in disease control. Cole's trials included application of nine materials in mid-June, 1973, with a second application being made in early July. The rate used was 8 ounces per 1000 square feet, each time. The principal conclusion in these trials was that a heavy infection of Fusarium blight could indeed be controlled by a high rate of "Ter-san" 1991. This fungicide proved the most effective treatment in the plots that were laid out across the fairway.

"The eight-ounce rate seemed like a 'massive dose' of material," says Knoll. "But it did not kill the grass, and it did control Fusarium. And that's why we expanded our control efforts in 1974. We also found we were getting control of other diseases."

Last year Knoll used a boom sprayer to cover about 25 acres of turf on Moselem Springs fairways. The first application was made June 20, when the weather was cool and dry. Weather continued cool, and rain was seasonal — 2" fell in a span of several days. In mid-July small areas of Fusarium developed, apparently where the boom treatment had missed. These were spot treated — and results were immediate. A second general application on the fairways was made July 24 at the eight-ounce rate during a period of high humidity and high temperatures. Rains and irrigation of the course moved the material down into the critical root zone. About three weeks later, when disease spots turned up on some fairways, the turf was spiked and four ounces of the fungicide and five ounces of wetting agent were sprayed.

Superintendent Knoll sums up his disease control program at Moselem Springs: "A late season evaluation showed we were getting good control, except for minor Roseum breakthroughs and for boom misses in our 1974 treatments. We're planning a repeat program for 1975. We have learned a lot about how to control Fusarium — and we certainly had better fairways to go into winter in 1974 than we have known for the last ten years. Our preventive disease control program represented only about