

Northwest TURFGRASS TOPICS

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From the President's Corner



By Dick Schmidt

What goes on behind the closed doors of a board meeting? Why don't they do this or do something about that?

I remember when I was a regular member of the N. T. A. and sat around in a friendly group and heard criticism after criticism about any and everything, as I am sure you do. We all know that it's human nature to criticize, and also very much a part of human nature to just sit back and do nothing. Just think how great an organization would be if just half of the membership would get themselves involved. Why don't you as a member of the N. T. A. step forward to help your own cause and get involved?

Our '72 conference at Ocean Shores, as you can see by the enclosed program, should be a great one. We have some new and unusual topics as well as some oldies with new approaches.

The second equipment, product and display show will be a great one. We have arranged the show right in the middle of all activities, with an emphasis on keeping the members and the displayers as close as possible. I am sure you will be pleasantly surprised at this unusual arrangement.

The golf tournament will be Tuesday, September 26th at the Ocean Shores Golf Course. Don Pupera will be running the competition with lots of super prizes. Be sure and bring your straight ball as this course will challenge the best.

Mrs. Blair and her committee on the ladies entertainment program has done just a super job setting up activities for the ladies in attendance. Be sure and tell your wife to join us at Ocean Shores this year and to be ready to have a good time. I am sure she will.

I hope you have all received appropriate information about this year's conference. If any of you have not for some reason or other, please drop a card to Roy Goss or myself and we will get the necessary information to you.

I am looking forward to seeing you at Ocean Shores.



To the Ladies Attending the Northwest Turfgrass Conference

By Jackie Schmidt

Dick and I are most anxious for you to come and enjoy yourselves at the conference at Ocean Shores the end of September. We promise you a busy time as a full program has been arranged for your pleasure. You are urged to participate in these planned activities which will still allow you plenty of leisure time for shopping, beach combing, horseback riding, just to name a few of other things to do at Ocean Shores.

Wednesday mid-morning will find us playing "Human bingo," followed by lunch at the beautiful Golf Course Dining Room. Golf clothing is in order as a nine-hole "Fun Golf Tournament" has been arranged for after lunch. No handicaps needed; just a few clubs, and a couple of golf balls. Anyone can win this one, so do participate. There will be plenty of time for a rest before the banquet Wednesday evening at Ocean Shores Inn.

Thursday about 10:30 A.M. we will gather for a scenic tour up the coast and then to Lake Quinault Lodge for a sumptuous luncheon and educational entertainment, followed by a choose-your-own walk through the beautiful rain forest. Transportation will be arranged for you. This is a most interesting trip which will culminate back at Ocean Shores about 4:00 P.M.

Tuesday and Friday are free time to do your own thing. We have been informed that September is one of the more beautiful months at Ocean Shores. Wearing apparel is informal . . . knit suits, slack suits, slacks and sweaters, and long skirts or cocktail attire for the banquet. However, just in case the unusual should occur, have available a wind scarf, rain gear and proper footwear to insure your comfort.

Don't miss this conference, do come and be prepared to have a grand time.

PROGRAM

NORTHWEST TURFGRASS CONFERENCE

SEPTEMBER 26-29, 1972
OCEAN SHORES, WASHINGTON

TUESDAY, SEPTEMBER 26, 1972

AFTERNOON:

12 noon

Golf Tournament—Don Pupera, chairman.

1 P.M.

Product and Equipment displays open—Ron Proctor, chairman.

WEDNESDAY, SEPTEMBER 27, 1972

MORNING:

8 A.M.

Registration—Dick Haskell in charge.

8 A.M. - 1 P.M.

Product and Equipment displays.

AFTERNOON:

1:15

Welcome, etc.

1:30 - 2:20

PAT AND PURR-WICK SYSTEMS—A summary report.
Dr. W. H. Daniel, Purdue University.

2:20 - 3:00

Functions of Surfactants, Spreader-Stickers, and Emulsifiers.
Mr. Robert W. Moen, Miller Products (Charles Lilly Co.).

3:00 - 3:20

Break.

3:20 - 4:00

Recent Growth in Golf. Mr. Buddie Johnson, National Golf
Foundation.

4:00 - 4:40

An "In Depth Look at *Ophiobolus graminis*," Dr. R. James Cook,
U.S.D.A., ARS, Pullman, Washington.

4:40

Questions and answers.

6:30

Social hour.

7:30

Banquet.

THURSDAY, SEPTEMBER 28, 1972

MORNING:

8:30 - 9:10

The European Cranefly—The Situation and Potential in the
Northwest. Dr. George Pesho, U.S.D.A., ARS, Pullman, Wash.

9:10 - 9:50

Past - Present - Future of Turfgrass Fungicides. Mr. William
Small, Mallinckrodt Chemical Co., St. Louis, Missouri.

9:50 - 10:10

Break.

10:10 - 11:00

Mowing Characteristics of Turfgrasses. Dr. J. R. Watson, Toro
Manufacturing Corp., Minneapolis, Minnesota.

11:00 - 11:30

Arsenic for *Poa annua* Free Turf. Dr. W. H. Daniel, Purdue
University.

11:30 - 12:10

Northwest Turfgrass Association annual membership meeting .

AFTERNOON

1:15 - 3:00

Panel Discussion—Pre- and Post-Emergence Control of *Poa
annua*. Dr. Roy L. Goss, Moderator, Western Washington Re-
search and Extension Center, Washington State University, Puy-
allup, Washington.

FRIDAY, SEPTEMBER 29, 1972

MORNING:

8:40 - 9:20

The Choice of Varieties is Important to Turfgrass Programs.
Dr. D. K. Taylor, Canada Department of Agriculture, Agassiz,
British Columbia.

9:20 - 10:00

Topdressing—What's the Purpose and Value? Mr. William
Benneyfield, U.S. Golf Association Green Section, Garden Grove,
California.

10:00 - 10:20

Break.

10:20 - 12 noon

Research Reports. Dr. Roy L. Goss, Washington State Univer-
sity, Puyallup; Dr. C. J. Gould, Washington State University,
Puyallup and Dr. D. K. Taylor, Canada Department of Agri-
culture, Agassiz, British Columbia.

Oregon Compost Heap



By Dick Malpass

Tim Manion, from Columbia - Edgewater Golf Course, is in the process of building new tees and cart paths. Bill Martin, from Agate Beach Golf Course, has recently completed two new tees on the Agate Beach Course. Bill Neussle, Superintendent of Charbonneau Golf Course, has completed the front nine and they will play in October. He is presently working on the back nine.

John Slaughter is presently grading on the Somerville Golf Course, King City Number Two. Jerry Bacon from Royal Oaks is now playing on some new tees, which he has been working on. Dick Malpass, at Riverside Golf Course, has been doing some additional tile drainage work on cart paths.

Jerry James has completed a new 18-hole course near Battleground, Washington and Gerritt Gerson is the golf superintendent.

John Monson, former golf superintendent of Corvallis Country Club, has recently accepted the superintendents' position at Broadmoor Golf and Country Club in Seattle. Corvallis Country Club is presently accepting applications for Golf Course Superintendent. The salary is open plus fringe benefits. Anyone interested in this position should contact Dr. Bill Paul, Jr., President, Corvallis Country Club, 1850 S. W. Whiteside Drive, Corvallis, Oregon 97330. The correspondence should be marked "personal".

The Golf Course Superintendent's Association of America has announced the appointment of a new executive director, Conrad L. Scheetz. Mr. Scheetz has a Bachelor of Science Degree in Commerce and Engineering from Drexel University in Philadelphia. He has had considerable experience in data processing and has already included a complete redesign of the accounting structure with GCSAA and has placed it on data processing equipment.

The Executive board of the GCSAA will meet in Portland, Oregon for its annual fall Board of Directors' Meeting. This is the first time ever that the GCSAA Board has met in the Pacific Northwest. They will, no doubt, be considering the possibility of the Northwest for future GCSAA conferences.

SECOND ANNUAL PRODUCTS AND EQUIPMENT SHOW AT CONFERENCE

By Ron Proctor

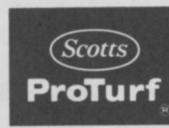
This year's N.T.A. Equipment and Products Show will again be held in conjunction with the annual N. T.A. conference September 26-29 at the Ocean Shores Inn.

The Ocean Shores Inn has the best to offer in exhibit facilities. The Equipment and Products Show will be held in the Shore Room. The Shore Room is located adjacent to the meeting rooms and registration area, making it very accessible to everyone.

Last year's exhibit generated a great deal of interest among the professional turfgrass managers, as well as the exhibitors themselves. Due to this interest, all available booths have already been reserved, and with more exhibitors and more viewing time this year's show promises to be bigger and better than ever.

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United States Golf Association, Green Section, Grants

By Roy L. Goss

The United States Golf Association, Green Section, for many years has supported turfgrass research at various locations and institutions around the U.S.A. In the past the USGA made many smaller grants so that more areas and research people could benefit from them. It has been determined, more recently, that rather than make a large number of small grants it was more productive to make a fewer number of larger grants.

The Green Section has further determined that their research fund should be placed in areas that have projects with the greatest yield potential in terms of research productivity and information that will serve the greatest number of people. They further desire to place their funds with research units with the greatest potential to solve specific problems and produce good research. For example, research on Bermuda grasses can best be supported in the states with the greatest use of that type of turf and with the problems that are most prevalent.

This year, the U.S.G.A. Green Section awarded a grant of \$1000 each to the Agronomy and Plant Pathology program at the Western Washington Research and Extension Center at Puyallup, Washington. This \$1000 grant each, will continue for a period of three years. This will make the total input from U.S.G.A.'s program to Northwest research \$6000 over the next three years.

The financial grant will be used by R. L. Goss in the Agronomy program to further sulfur studies of turfgrasses. Besides the quality effects of sulfur on turfgrasses other information as follows will be gained:

1. The effect of sulfur on *Poa annua*.
2. The effect of sulfur on algae control.
3. The effect of sulfur on soil pH.
4. The effect of sulfur on the amino acid and protein content of turfgrasses.
5. The effect of sulfur on nitrogen metabolism in turfgrasses.

Some of the laboratory tests involved in analyzing these data are quite expensive and the \$1000 per year for the next three years will be the making of the results of this sulfur study.

The \$1000 annual grant to the Plant Pathology program will be used primarily in a large bentgrass varietal study aimed at determining if bentgrass varieties are resistant to Fusarium patch disease caused by the fungus *Fusarium nivale*. This program is headed up by C. J. Gould, Plant Pathologist at the Western Washington Research and Extension Center. Gould has accumulated varieties, selections, and breeders stock from all over the world for this study. At the present time there are over 103 entries, which include 61 seeded types and 42 stolonized types. These plots are established for the most part, with some of the stolonized varieties still developing at this time. The fall of 1972 will yield the first information regarding varietal resistance and the next two years, 1973 and 1974 will yield valuable information. Gould and Goss will cooperate on this project to develop as much information about these grasses as possible. In addition to the disease resistance, Goss will obtain data such as color factors, textural factors, density, aggressiveness, and response to treatment.

Final Notice for Annual N.W. Turfgrass Meeting

Your president, Dick Schmidt, has issued three announcements up to now regarding the Turfgrass Conference, including dates and location. Ron Proctor, chairman of the Product and Equipment Display Show has likewise pointed out the dates and events.

The Board of Directors and the Program Committee feel that we have a very well rounded and interesting program for the meeting at Ocean Shores this September. Although the conference proper will not begin until 1 P.M. on Wednesday, September 27, there will be plenty of activity beginning on Tuesday, September 26. Take this extra day and come early to en-

Continued on Page 5, Col. 1

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These trials are for screening purposes. The best candidates will be re-established at Farm 5 in larger management plots.

We are most grateful for the confidence expressed by U.S.G.A. in our research program and we hope that all of you will join us in showing your appreciation as well.

N. W. TURFGRASS MEETING
Continued From Page 4, Col. 2

joy a little relaxation and to technically bring yourself up-to-date with Products and Equipment that the displays will be showing. It is equally important to keep yourself informed of new products and new equipment as it is to keep up with research technology. These Product and Equipment Displays are designed for this very purpose of introducing you to new materials and ideas. At these Product and Equipment Shows, you have an opportunity to informally chat with Company representatives about their products or equipment and to ask questions that may be on your mind. These people are very happy to discuss any of their ideas or yours at this time.

We have a varied program including several interesting subjects and many good speakers, as you will see in the program itself which you will find on pages 2 and 3 of Turfgrass Topics. There has been some definite progress made in *Poa annua* pre-and post-emergent control and we plan to have an informal two-hour session on Thursday afternoon to discuss this subject in depth with a many research people from the 11 Western states as we can induce to stay for this session. Researchers from the 11 Western states will meet on Tuesday and Wednesday morning preceding the turf conference to coordinate all of the turfgrass research that is occurring in the 11 Western states. Some of these fellows will have to return home before Thursday, but we hope to have enough of them left to conduct a very informative session. We also intend to call on certain Turfgrass managers, who have practiced *Poa annua* control to sit in with these researchers on this panel.

The Ocean Shores Conference site was selected because of ample facilities and a peaceful and tranquil setting for a real educational conference. The only thing there to distract ones thoughts is the peaceful roar of the breaking surf and the temptation to get out on the golf course. We are sure you will all enjoy the conference, so get your reservations in now. You can obtain room reservations by calling Seattle, MA 3-2111 or writing directly to Ocean Shores, P.O. Box 82, Ocean Shores, Washington 98551.

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The Future of Phenoxy Herbicides as Weed, Brush Killers

By Roy L. Goss

Herbicides classed at "Phenoxy" type are those such as 2,4-D; 2,4,5-T; 2,4,5-TP, etc. These herbicides have performed effectively and safely on cropland and noncropland in the United States for more than 20 years. The need for these materials is clearly evident, likewise, the need for caution and safe use is obvious as well.

In an article by Dow Chemical Co., in their publication "Down to Earth", published in the spring of 1972, it was indicated that the EPA (Environmental Protection Agency) has taken a more relaxed attitude about 2,4,5-T and other related Phenoxy herbicides. They indicated that the teratogenic effects (deformed or monster animals) can only be caused by dosage levels far in excess of any possible exposure.

The U.S.D.A. states that prohibiting the use of Phenoxy herbicides "would cost the U.S. farmers an additional 290 million dollars to maintain current agricultural production. In addition, farmers and their families would have to work 20 million more hours to control the weeds without these herbicides. For the extra labor, the farmer would obtain no additional income."

The article further points out that over a million dollars has been expended over the past two years to prove the safety of Phenoxy herbicides to man and his environment. From a scientific base, the Phenoxy herbicide can contribute economically, efficiently, and safely in the future for the control of broadleaved weeds and brush, on food crops, pasture, range land, and non-cropland areas as they have for many years up to now.

It is easy to damn and condemn chemicals from the ecologic viewpoint, but it is a little more difficult to come up with facts regarding the hazards of chemicals. It is interesting to note that a recent report indicated that the brown pelican on the California coast have had the largest hatch in 1972 that has occurred in many years. DDT was possibly the chief factor claimed by the ecologists for the decline of the brown pelican. I leave you with one question. Is it possible that through the restricted uses of DDT in scarcely one year, that the environment could be so cleaned up that the brown pelican is on the increase again? Is it not possible that through some evolutionary cycle, that the brown pelican was on its way out anyway?



The Thatch Patch



By Jim Chapman

The latest Western Canada Turfgrass newsletter "The Turf Line News," carried an article by R. A. Broome answering a question on . . . the greatest task in maintaining sportsfields. His comment was . . . "drainage, soil used, lack of funds to install adequate drainage systems."

How true! Whether athletic fields or golf courses. The funds expended on design, irrigation, buildings seem to disappear as construction reaches final stages. Thus, the stages that suffer most often are those most visible as the new golf course develops—drainage, soil mix, sprinkler head locations.

George Gumm, while Superintendent at the Ocean City (Md.) Country Club, once said, "All you have to have for a good golf course is good drainage and common sense. If you're low on common sense, double up on drainage."

The grapevine has new golf courses starting soon in Seattle, Port Ludlow, Cle Elum, Vancouver, Washington; Ashland and Biggs Junction, Oregon; at least two near Vancouver, B.C.; one at Big Mountain, Montana.

Dick Rose took his Rainier Country Club experience, earned under Ron Proctor, to his new position as Superintendent of the Sage Hills Golf Course in Warden, WA. He replaced Bond Harmon, new Superintendent at Kah-Nee-Ta, the Warm Springs Indian Resort golf course.

Interesting—the articles on the importance of sulfur in various trade magazines. Dr. Fred Grau has authored several, including one in "Better Crops with Plant Food." He expounds on the value of potassium sulfate as a S source and quotes research reports of . . . who else? . . . Goss and Gould. Look for more as research on the value of S continues.

If compaction—thatch—silty soil is still giving some problems, remember the long wet winter just past. It helped complicate already tough turf maintenance conditions. Fortunately, new machines (triplex mowers with thatching reels, fast topdressers and aerifiers) are also available—if at a cost—to help speed and ease the work. Come, look at these at Ocean Shores. You'll never see a better display locally. See you there!

Western Regional Coordinating Council on Turfgrasses Meets Meets at Puyallup, Ocean Shores

By Roy L. Goss

The first Western Washington Regional Coordinating Council of the 11 western states will meet at Puyallup, Washington beginning Sunday, September 24, 1972. Representatives from institutions conducting turfgrass research from the 11 western states and the three western provinces of Canada (Saskatchewan, Alberta, and British Columbia) will meet to discuss turfgrass research programs which are being conducted in this region. The principle aim of this council is to bring together this group for a free exchange of ideas and an effort to better coordinate the research being conducted.

Regional Coordinating Councils have functioned for many years through the Agricultural Experiment Stations in various agricultural pursuits. It has proven very effective in developing a better direction for research for various crops. Research people endeavor to keep in touch with what is going on throughout the world, but with a vast amount of literature being published and work being done, it is nearly impossible for any one individual to keep abreast of the entire program. It is obvious that through all researchers, different ideas and approaches are constantly being employed. Through these council meetings we may save many man years of futile attempts by eliminating the duplication of effort.

This first meeting on turf was organized by Dr. J. D. Rogers of Colorado State University at Fort Collins, Colorado. He conceived and promoted the idea with all research institutions in the west. The idea was enthusiastically received by all turfgrass researchers and this first meeting is the result of his efforts. Puyallup was chosen for the first meeting by the majority of persons responding since there is a turfgrass conference planned at a suitable time where this group can attend and participate.

The group will assemble near Puyallup on Sunday evening, September 14. On Monday morning, September 25, there will be a brief tour of turfgrass research and the turfgrass industry in the Puyallup area. From there the group will move to Ocean Shores by Monday evening to begin formal sessions on Tuesday morning. The delegates will be in session until Wednesday noon, at which time the Turfgrass Conference will convene. If additional time is necessary, the conference can continue until the business is completed.

We are looking forward, with a great deal of interest to this first meeting and to the great potential of this type of coordinated effort.

N.W. TURFGRASS CONFERENCE

SEPTEMBER 26-29, 1972

OCEAN SHORES, WASHINGTON

Expanded Studies on Typhula Snow Mold Control In Eastern Washington

By Roy L. Goss

Throughout the years, Typhula snow mold occurs with variable intensity. Some years are good snow mold years and others are practically free of the disease. The standby materials for treating turfgrasses attacked by *Typhula incarnata* have been phenyl mercury and a mixture of mercuric and mercurous chloride (calo-calo). More recently, new materials appearing on the market indicate good potential *Typhula* control.

Dr. D. K. Taylor, from the Canada Department of Agriculture Research Station at Agassiz, B. C., has conducted several trials in the colder interior of British Columbia and has obtained variable results between locations. He found no one material to be totally effective in all three of his test locations. However, some very interesting results occurred from his trials.

The trials to be conducted in Eastern Washington will be coordinated with Dr. Taylor's efforts and expanded to include various combinations of materials and timing factors. Bud Ashworth, of Hangman Valley Golf Course at Spokane and Johnny Harrison of Hayden Lake Golf and Country Club at Hayden Lake, Idaho, have volunteered research areas for these trials for 1972. It is anticipated that these trials will be initiated beginning in early fall. Results of these trials will not be known until spring thaw.

Fusarium patch control will be worked into this study to determine the severity of this disease in early fall and early spring. A suggested program will be provided to all persons in the snow mold region who may wish to try some of the new materials upon request.

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EXPANDED STUDIES ON FUSARIUM PATCH DISEASE OF TURFGRASSES

Plots have been established and materials are being collected by C. J. Gould for Fusarium patch control trials in the fall of 1972. With the changing role of chemicals being what it is, one never knows from year to year what may be prohibited by the EPA. We must constantly seek new materials for the control of Fusarium so that we may stay ahead and not be caught in the position we were 25 years ago. Results of these trials will be published at the end of the application season.

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Progress on POA ANNUA Control-Pre-, Post-Emergence

By Roy L. Goss

We are not trying to talk this weed to death but wish to keep you informed of any progress being made.

Pre-emergence trials on putting greens have been conducted at the Western Washington Research and Extension Center since May of 1970. These plots have received continued chemical treatment for 2-1/2 years and some of the information should be passed along to you. Bensulide and tricalcium arsenate are only two basic chemicals being employed for the pre-emergent controls, since others have been eliminated. These materials are being applied with various combinations of fungicides. The fungicides merely control *Fusarium* patch so that we may determine if disease is one of the principle factors determining the invasion of *Poa annua* into bentgrass turf.

In summary, August evaluations indicate that a single application of Bensulide annually at 15 pounds per acre active ingredient' either by itself or in combinations with fungicidal treatments still maintains an undesirable level of *Poa annua* in the plots. Records taken for the last three years indicate that there has been a reduction in the total *Poa* although the average still remains about 22 percent *Poa* in the plots. Plots treated with Bensulide on the basis of 12 pounds active ingredient per acre with 3 pounds per acre additional being applied every 3 months has reduced *Poa annua* to the degree of only a trace or no observable plants being found in any of the plots.

Tricalcium arsenate applied to achieve a level of 18 pounds of product per 1000 sq. ft. in one year has reduced the *Poa annua* population to no observable plants in the plots, regardless of fungicidal treatment.

Where fungicides were applied alone with no pre-emergence treatment, the plots contain an average of 33 percent *Poa annua*.

There were only slight color variations among the treated plots at the time of this evaluation. Earlier in the season, plots treated with tricalcium arsenate, had considerably reduced color over the other plots. At the time of this rating, the tricalcium arsenate plots rated slightly better in color than all others.

In regard to density, the greatest turf density was obtained where no pre-emergence treatment was applied. From the August evaluation the following densities were estimated: one annual treatment with Bensulide produced a 9.85 average density out of a possible 10. Repeat application of Bensulide yielded an average density of 8.5 out of 10. Plots treated with tri-calcium arsenate average 6.5 density out of a possible 10. Plots treated with fungicides without pre-emergence average slightly better than 9.5 and the check plots averaged 8.3.

In summary, there is no question that the pre-emergence herbicides Bensulide and Tricalcium arsenate will control *Poa annua* if applied properly to the proper soil and grass conditions. These studies are not entirely conclusive at this time and these treatments are not necessarily recommended. No conclusion should be drawn from these studies until at least one more year of data have been accumulated and root studies have been completed.

Continued on Page 9, Col. 1

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POA ANNUA

Continued From Page 8, Col. 1

The effects of sulfur and other nutritive elements on *Poa annua* development will be reported in the turf-grass conference proceedings under the research section, so will not be discussed in this article.

Pot-emergence control plots of *Poa annua* were established in August, 1972 and information regarding any effective treatments will be published in future articles in Turfgrass Topics. As a matter of interest, those of you who read the article in the Golf Superintendent in the August-September issue should take a word of caution that the chemical Kerb should not be used at all or with extreme discretion on bentgrass turf. Your editor has tested this material over three years ago and found that the material has an extremely narrow range between selective control and phytotoxicity to bentgrasses. It is very fortunate that this material is working so successfully on Bermudagrass, however, Dr. Horn pointed out their specific technique in this very well conducted experiment.

**EXPANDED STUDIES ON OPHIOBOLUS
PATCH DISEASE IN TURGRASSES**

Recent findings on some of the factors affecting *Ophiobolus* disease in cereals by R. James Cook, indicate that some additional trials for the control of *Ophiobolus* patch in turf should be pursued. The cooperative project between C. J. Gould and R. L. Goss is currently being initiated. Plots where these trials will be conducted have been fumigated with methyl bromide and planted to Highland bentgrass. It is known that turfgrasses established on soils fumigated by methyl bromide are attacked to a higher degree by *Ophiobolus* patch than on soils non-fumigated. More recently, Dr. Cook has learned that soils from areas free of *Ophiobolus* patch disease on wheat can be moved to *Ophiobolus* infected sites and help to overcome the disease. This technique as well as a number of other nutritional and chemical approaches will be investigated in these trials.



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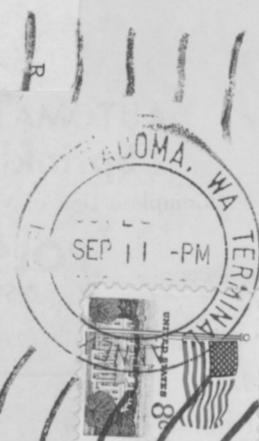


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