

File

UNITED STATES GOLF ASSOCIATION
GREEN SECTION
Southwestern Office



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Southwestern Turfletter

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PLANNING

Throughout the Southwest springtime is rapidly approaching. Within a few weeks golfers will be appearing in increasing numbers and activities on the golf course will hit a much faster pace. Your job as maintenance superintendent will be much easier if you have well-laid plans before the increased tempo of activities starts. Plans must be built after an analysis of last year's records, and an inventory and evaluation of the status of your turf at the present.

HOW WILL YOU FERTILIZE YOUR TURF THIS YEAR? Do you know the pH of the soil on your greens and fairways? If not, how could you know whether or not you need lime or whether you may have built up alkalinity to the point where it may be harmful? Do you know how much available phosphorus and potash the soil under your greens contains? If not, how do you know whether to use a complete fertilizer or to rely on straight nitrogen materials. Are you prepared to use iron sulfate as a supplement in combating chlorosis? Do you have adequate spraying facilities to apply iron sulfate as a spray?

WHAT EFFORTS WILL YOU MAKE TO CONTROL CRABGRASS, GOOSEGRASS AND OTHER WEEDS THIS YEAR? Will you use a pre-emergence spray such as Crag Herbicide 1 to prevent emergence of crabgrass and goosegrass seedlings, or will you wait until they appear as seedlings and then attempt to control them with phenyl mercury acetate products? When will you begin to do this work? Is all the necessary equipment for herbicide application in good working order?

WHAT KINDS OF DISEASES ARE YOU LIKELY TO ENCOUNTER THIS YEAR? Do you have chemicals on hand to use in combating these diseases? Is your spray rig in good working order? Do you have enough spare parts so that a breakdown will not seriously interfere with your program? Some of the more important diseases of turf in the Southwestern Region are discussed on page 3.

WHAT KIND OF INSECT CONTROL ARE YOU PREPARED TO UNDERTAKE THIS YEAR? Perhaps the most important single insect pest is the sod webworm. Rhodesgrass scale is a very serious pest in some areas. And one must always be on the lookout for army worms and cut worms. Army worms especially can be extremely destructive if control measures are not undertaken immediately. Fortunately, most of the insects found in golf course turf can be controlled with relatively few insecticides. Chlordane is perhaps the most important general-purpose insecticide. Then you should have adequate supplies and plans for using it should the need arise.

DO YOU KNOW THE TOURNAMENT SCHEDULE FOR YOUR COURSE IN 1956? This is important. How can you plan your work so that you interfere as little as possible with the play on your course unless you keep up with the club's plan for special events.

HOW USEFUL ARE YOUR RECORDS? Can you recall the dates when you first saw crabgrass on your course during the last three years? If you can't recall, how do you know when to plan your first treatment? Do you know how much total lead arsenate, how much chlordane or DDT has been applied on your greens? If not, how can you know whether you have adequate control for grubs and other soil insects? These questions suggest the importance of keeping good records of your golf course maintenance activities. May we suggest that you begin to keep a diary in which you enter the dates of first crabgrass emergence, the dates on which disease activities occurred, the kind of weather accompanying disease attacks, and the kind of weather preceding the appearance of crabgrass seedlings. A simple diary of this kind is not difficult to keep and it will help you immeasurably in making your plans in succeeding years.

Dr. Spencer Davis, speaking at the Oklahoma Turfgrass Conference, urged golf course superintendents to develop case histories on disease attacks because it is only in that way that we can finally come to know the circumstances which attend the attacks of diseases, and it is in this way that we may finally be able to predict with greater accuracy when troubles are likely to occur.

One of the major fungicide manufacturers has recently distributed charts on which records of fungicide applications may be kept. It is urged that you make use of such helps in keeping your records and that you maintain these charts permanently because they help you in estimating your need for fungicides, insecticides, herbicides, fertilizers, etc. Good plans for future activities must be based on good records of past activities.

WATER - THE 1955 YEARBOOK OF AGRICULTURE

The following statements are excerpts from the Preface, by Alfred Stefferud, Editor of the Agricultural Yearbook for 1955:

"There's a lot to be known about water...We cannot live without water; we could live better if we knew more about it...The realization of ignorance is the beginning of wisdom. The statement of a problem is the first step in its solution. It is a duty to discover facts in a true scientific, unbiased, unselfish spirit - a duty for us who prepared the book and, I submit, for those who read it."

If you don't have a copy, write to your Congressman. He has copies for free distribution. If his supply is exhausted, the book may be purchased from Superintendent of Documents, Washington 25, D. C. Price: \$2.00.

By all means, try to obtain a copy. It will be a valuable addition to your library.

IMPORTANT TURF DISEASES OF THE SOUTHWESTERN REGION

Helminthosporium species probably are the most serious disease organism in the Southwestern Region. The various species of Helminthosporium have different characteristics so that they do not fall into a well-defined pattern. However, there are some things that one may do to minimize the effects of Helminthosporium: Keep thatch off the greens; don't allow the greens to become weakened because of iron chlorosis; don't allow them to become weak and root systems to become shallow because of saturated soils; and don't allow the greens to wilt. If Helminthosporium strikes your turf in spite of the best management you can supply, the phenyl mercury materials work quite well in keeping the disease under control. It should be stressed that good management is the most important factor and that fungicides are a "crutch" in case the disease occurs in spite of good turf vigor.

Curvularia is another disease that is found throughout this region. It is generally agreed, however, that Curvularia is not in itself a serious pathogen. It occurs usually in association with other disease activities or on turf that has been weakened by chlorosis or scald (wet wilt). Some superintendents have reported success in controlling Curvularia with cadmium fungicides.

Another disease that has caused considerable trouble is Pythium. Pythium usually is found under conditions when the surface of the turf is very wet. It is the nature of Pythium to thrive under conditions of almost 100% humidity; therefore, if turf can be kept dry, Pythium will be minimized. Dr. F. L. Howard, of the University of Rhode Island, has reported that Malachite Green - a dye which has fungicidal properties - will halt the mycelial growth of Pythium. This material is not necessarily a preventive but it does destroy the mycelium when the fungus is active.

Brown patch was the first turf disease described in the literature and it has been one of the most serious for many years. Brown patch usually may be controlled by the use of Tersan. In some cases, however, it is found that the activity of the Tersan is increased considerably by using it in combination with some of the mercury compounds.

Dollar spot has been considered a serious disease of turfgrass throughout the nation. There are indications, however, that in the South, this disease may have been confused with Helminthosporium because in some cases, symptoms are similar. Adequate fertilization is important in the control of dollar spot. Cadmium compounds offer good control of the disease when it does occur.

It is frequently very difficult to identify turf diseases in the field with any degree of certainty. For this reason many superintendents in the Southwestern Region have come to use a "shotgun" mixture. They have used a combination of Tersan, phenyl mercury and cadmium fungicides and have found that it succeeds quite well. Recently some manufacturers have been producing what they call "broad spectrum" mixtures of fungicidal materials designed to control several of the common turfgrass diseases. These products are relatively new and there is not yet sufficient experience to be certain as to whether they will provide adequate control.

Whenever you have questions or problems, contact your Regional Office. It exists to serve you.

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