Thatch Control Important In Overall Turf Management Program

Recent research indicates that some pesticides may have a marked effect on thatch accumulation. As reported in the <u>Agronomy Journal</u>, R. W. Smiley, Ph.D., Assistant Professor of Turfgrass Pathology at Cornell University, with research support from M. M. Craven, conducted a study to determine the effects of fungicides on thatch and pH.

After testing 14 fungicides and one nematicide on Kentucky Bluegrass turf through three seasons of application, Dr. Smiley concluded that different fungicides induce significant variations in thatch accumulation, with some spurring significant accumulation while others cause little or no accumulation.

"Our results indicate that decomposition of thatch was possibly impeded through the inhibition of microbial activities by unfavorable pH environment and/or by direct toxicity of the fungicides", Dr. Smiley explains.

Dr. Smiley says that decomposition of sulfur-bearing fungicides contributed sufficient acidity to inhibit the decomposition of thatch and these acidification processes explain the magnitude of thatch accumulation in most instances.

"In this study, the combined application of ethyl thiophanate and thiram contributed the highest sulfur amounts. It would require about three pounds of lime per 1,000 square ft. per year to neutralize the acidity contributed to soil by this fungicide program", Dr. Smiley comments.

Thatch depth measurements where the combination of thiram and ethyl thiophanate were applied showed a thatch depth of 18.4 millimeters and a pH level of 5.7. Non-treated control grass showed a 6.3-millimeter thatch depth and a pH of 6.3.

But, Dr. Smiley points out, acidification is not responsible for thatch accumulation in plots treated with nonsulfur-bearing fungicides, which displayed thatch depths of 13.8, 17.0 and 16.1 millimeters, respectively, while showing pH levels above 6.0.

"For these treatments, it appears that direct toxicity towards the microflora is more important than indirect suppression through acidification of soil", he contends.

In contrast to these fungicide treatments resulting in significant thatch accumulation, turfgrass treated with other fungicides such as cycloheximide (Acti-dione TGF), cycloheximide + quintozene (Acti-dione RZ), captan (Captan), anilazine (Dyrene) and chlorothalonil (Daconil 2787) showed minimal thatch accumulation and pH levels not significantly different from the check areas.

The Acti-dione TGF-treated turf had a thatch accumulation measuring 2 mm. and a pH of 6.3; Acti-dione RZ-treated turf had a thatch accumulation of 2.8 mm. and a pH of 6.5, compared to a thatch accumulation of 6.3 mm. and a pH of 6.3 for the non-treated control turf. Dr. Smiley says that too often fungicide choice is made only by taking immediate cost and target pathogens into consideration, without considering the long-term effects which the fungicide may have.

"The long-term effects of these fungicides are far more important to the overall economy of management programs and to turfgrass quality than the short-term cost and fungitoxic-spectrum considerations", Dr. Smiley reports. He stresses that costs to remove thatch and to neutralize soil acidity "are likely to exceed differences in costs of fungicides. "Whenever possible, turfgrass managers should attempt to utilize the most economical long-range maintenance programs", Dr. Smiley concludes.

For more information contact LOREN E. BYERS, THE UPJOHN COMPANY, BUILDING 190, KALAMAZOO, MICHIGAN 49001 616/385-6658.

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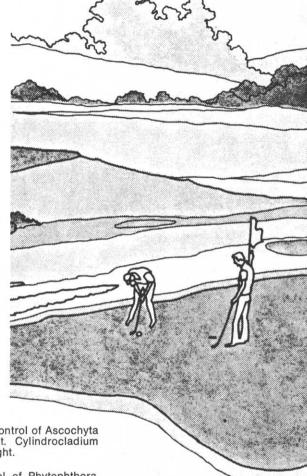
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GCSAA History

Melvin B. Lucas, Jr.*
HISTORIAN Committee Chairman

We present, for the edification of new members, excerpts from the original history compiled by John MacGregor, second President of GCSAA, and Paul E. Weiss, Sr., the twenty-first President.

The National Association of Greenkeepers of America was founded September 13, 1926, in Toledo, Ohio, at the Sylvania Country Club.

From the impetus gained under the leadership of its first President, Colonel John Morley of Youngstown, Ohio, the organization has grown to embrace members in every state of the United States, Canada and many other countries. John Morley was President from 1926 to 1932, and spent much of his time traveling about the country to solicit members and promote the Association. This number has grown from the original 29 charter members listed in the January, 1927, *The National Greenkeeper*, to today's total of more than 4,000.

The first annual meeting was held in Chicago, on March 21-26, 1927, at the Hotel Sherman. The golf equipment show was organized under the Chairmanship of Fred A. Burkhardt of Cleveland, Ohio. The show has grown rapidly from its very small display in 1927 to 20,000 square feet in 1966 and now to more than 4.5 acres of exhibit space. Attendance at the Conference first exceeded 5,000 in Anaheim, California, site of the 45th GCSAA Turfgrass Conference and Show, with a total registration of 5,086. More than 6,500 attended the 1979 Conference in Atlanta.

There were no annual meetings or shows during the war years. Harold Stodola remained as President from 1941 to 1945, and held the Association together with the strength of his pen and a deep love for his profession.

The first publication of the Association was *The National Greenkeeper*. The magazine ceased publication during the bank collapse in 1933, when the closing of the Guardian Trust Company in Cleveland, Ohio, left the Association without funds.

Recovery was slow and personal loans from several local and district greenkeeping groups saved the Association from total collapse. Improvement before World War II was reflected in financial condition and increased membership, but the war curtailed the advancement of all sport activities.

A change in name was made in 1938 to the Greenkeeping Superintendents Association and in

1951, to the Golf Course Superintendents Association of America. The name of the official publication, The Greenkeepers Reporter, was changed in 1951 to The Golf Course Reporter, and in 1966, to The Golf Superintendent. In 1970, the magazine size increased from 7" x 10" to its present 8½" x 11". The name of the magazine was changed to Golf Course Management with the January, 1979 issue.

The Association first elected as Secretary, W.J. Rockefeller of Inverness Club, Toledo, Ohio, who was followed by John Quaill of Highland Club, Pittsburgh, Pennsylvania. Acting as executive secretary and magazine editor during the Association's early years were Mrs. Gertrude A. Farley, Leo J. Feser and August "Gus" Brandon. Executive Directors have been Agar Brown, Dr. Gene Nutter, Ben Chlevin, and, as of mid-summer 1972, Conrad L. Scheetz.

One of the most important milestones in GCSAA history was the adoption of a very progressive certification program. In early spring of 1969, Clifford Wagoner and Walter Boysen, Co-Chairmen, and their Certification Committee began a very intensive study which resulted in adoption of the program in the late fall of 1970.

Another giant stride was taken in 1970 when the position of GCSAA Director of Education was created.

The original Association headquarters office was located in St. Charles, Ill., and later in Jacksonville, Fla. In 1965, the offices were moved from Florida to Des Plaines, Ill., and as a result of a long and intensive study, the Golf Course Superintendents Association of America dedicated its own Headquarters building in Lawrence, Kansas, on January 12, 1974.

The history of the Golf Course Superintendents Association of America has been marked by sincerity and enthusiasm for its officers and members. The Association's foundation was built on love and respect of humanity, the personal satisfaction that comes from providing enjoyment to others through the game of golf, and by working with nature to provide beauty and utility. This is a glowing tribute to founders and supporters of GCSAA, the leading organization of those concerned with the profession of golf turf management.

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