

FEB 20 1958



UNITED STATES GOLF ASSOCIATION
GREEN SECTION

Mid-Continent Turfletter

MID-WESTERN DISTRICT
ROOM 241, LASALLE HOTEL
CHICAGO 2, ILLINOIS
TELEPHONE: STATE 2-7485

No. 1

February - 1958

SOUTHWESTERN DISTRICT
TEXAS A & M COLLEGE
COLLEGE STATION, TEXAS
TELEPHONE: VICTOR 6-5210

DR. MARVIN H. FERGUSON
MID-CONTINENT DIRECTOR
NATIONAL RESEARCH COORDINATOR

JAMES L. HOLMES
MID-WESTERN AGRONOMIST

JAMES B. MONCRIEF
SOUTHWESTERN AGRONOMIST

THE COST OF GOLF

Participants in the recent USGA Green Section educational meeting in Chicago were concerned with ways of meeting the rising costs of golf. Talks dealt with this subject from the standpoint of technical advances and administrative methods which would insure the club against inefficiency.

The most striking point made during this program is that - THE COST OF GOLF COURSE MAINTENANCE IS A RELATIVELY SMALL PART OF THE CLUB EXPENSE. This point was made by several speakers.

Bob Williams, of Beverly Country Club in Chicago, showed charts to illustrate the decrease in man hours required for golf course maintenance through the years. This increased efficiency has been offset costwise by higher hourly wage rates. He also showed charts which provided a picture of "golf costs" in relation to "country club costs."

Mr. J. Porter Henry of St. Louis foresees a need for more "golf clubs" as contrasted to "country clubs." A club which exists primarily for the purpose of golf brings the game within reach of many more people.

The proceedings of the Green Section educational meeting will be presented in detail in an early issue of the USGA Journal.

A NEW TOOL FOR WEED CONTROL ?

Anderson and McLane reported results of studies with fluorophenoxyacetic acids on the control of crabgrass and annual bluegrass in "Weeds," Vol. 6, No. 1, Jan. 1958. The following statement is quoted from the summary of their article:

"Potted plants of annual bluegrass in the greenhouse were effectively sterilized from 4 to 6 weeks after treatment with 4-fluorophenoxyacetic acid at 0.5 lb/A. In a mowed lawn, plants failed to produce seed heads during the spring flowering peak after having been treated 5 weeks earlier with 0.5 to 1.0 lb/A. In the greenhouse crabgrass was severely checked from 6 to 8 weeks after treatment with 0.5 lb/A. Vegetative growth of Kentucky bluegrass and bentgrass in a lawn was not affected at a dosage of 1.0 lb/A. Effective control of annual bluegrass and crabgrass in fine turf by destruction of the seed crop therefore seems possible and worthy of field trial."

THE RAINMAKERS

Mr. Archie Kahan, Director of the Texas A. & M. Research Foundation says that present estimates of the potential increased rainfall from artificial rainmaking practices are in the order of 9 to 17%. This would appear to be a relatively small increase. He indicates, however, that one of the areas for hopefulness is the possibility of distributing rainfall over a longer period and thereby permitting more efficient use of the precipitation. Such a possibility might be of greater value than an increase in total amount of rainfall.

GIBBERELIC ACID ON ZOYSIA GRASSES

Dr. Victor B. Youngner reports the results of studies on the effects of gibberellic acid on the rate of establishment of Zoysia in Southern California Turfgrass Culture, Volume 8 - No. 1. The following statements are extracted from Dr. Youngner's article:

"Studies were conducted in the Department of Ornamental Horticulture at UCLA in 1957 to determine what practical value gibberellic acid might have in increasing the rate of establishment of grasses planted vegetatively. Zoysia was chosen for this purpose since it is notorious as a slow growing grass requiring a long period of establishment."

"Field plantings were established in the summer of 1957 to further test the effects of gibberellic acid on Zoysia. Three Zoysias were used, Meyer strain of Z. japonica and two selections of Z. matrella. The planting material was washed in water to remove all soil. Half of this material was then dipped in a 100 ppm solution of gibberellic acid and half was untreated. Planting was by uniformly spaced sprigs.

"All the sprigs turned brown after planting and showed no new growth for approximately two weeks. New growth appeared first in the plots from the untreated materials of all varieties and could be clearly seen throughout before any appeared on the plots from the treated material. Early growth was lighter green on treated material than on the untreated, despite regular applications of nitrogen. The gibberellic acid appeared to have reduced the percent survival of the sprigs slightly.

"The effects of this initial injury and growth retardation was evident throughout the summer. The plots planted with the untreated material had a higher percent cover than the treated by the time low fall temperatures stopped growth.

"These studies showed that treating Zoysia planting material with gibberellic acid will not improve the rate of turf establishment. The increased top growth demonstrated in the greenhouse studies may be little value as far as turf is concerned."

Our readers are referred to the original article for details of these investigations.

NUTRITION AND TURFGRASS DISEASES

Professor Houston B. Couch of Pennsylvania State University presented information to the Golf Course Superintendents Association of America at their recent conference in Washington, D. C. on a subject that has not been given enough attention previously. He presented a report of information gained from numerous investigators. A part of the report is reproduced for the benefit of our readers:

"The Influence of Nutrition, pH. and Soil Moisture on Diseases of Turfgrass.

LARGE BROWN PATCH - Recent work, conducted under controlled greenhouse conditions, at the Pennsylvania State University has revealed that while large brown patch (Rhizoctonia solani) on Seaside bentgrass responds very readily to different levels of nitrogen fertility, these reactions can be offset by varying additions of phosphorus and potassium. Plants grown under low nitrogen fertility, with normal phosphorus and potassium levels, were definitely less susceptible to large brown patch than those grown at normal balanced fertility. However, when phosphorus and potassium levels were reduced in conjunction with nitrogen, susceptibility to large brown patch increased. High nitrogen, with normal levels of phosphorus and potassium, brought about a definite increase in susceptibility to disease. When phosphorus and potassium were increased concurrently with nitrogen, however, the increased susceptibility to large brown patch was offset.

There was no alteration in disease reaction when plants were grown under balanced nutrition from pH 4.0 to 7.0. However, at pH 8.5, and above, bentgrass plants became less susceptible to disease. Under conditions of high nitrogen, with normal phosphorus levels, the plants were less susceptible to large brown patch at pH 7.0 than at pH 4.0 or 5.6.

Soil moisture in the readily available range (field capacity to permanent wilting percentage) had no influence on disease development."

"RED THREAD - In Washington State, more red thread disease (Corticium fuciforme) was observed in poorly nourished lawns during the winter of 1956-1957 than in well nourished ones. Field tests, under naturally occurring disease conditions, revealed that an increase in overall fertility gave a decrease in disease severity. Heavy nitrogen applications were particularly beneficial in disease reduction."

SEED SUPPLY OUTLOOK

According to reports in recent issues of seed trade magazines, there appears to be a plentiful supply of most turfgrass seeds. The exceptionally good 1957 crop should be reflected in reasonable prices.

Mid-Continent Turfletter

USGA GREEN SECTION

Sec. 34.66 P.L.&R.
U. S. POSTAGE
1 1/2 ¢ PAID
College Station, Texas
Permit No. 80

Mr. Ralph W. White, Jr.
Asst. Ornamental Hort.
University of Florida
Gainesville, Fla.