Southern California Turf Culture

A Quarterly Publication devoted to the activities of the Experimental Program in Turf Culture of the College of Agriculture, University of California, Los Angeles 24, California.

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THE CALIFORNIA TURF CONFERENCES

The two California conferences were held in early October with excellent weather. The out-of-state speakers at both conferences were Mr. 0. J. Noer, perennial favorite at such conferences in all parts of the country, and Dr. W. H. "Bill" Daniel, guiding hand of the Midwest Turf Foundation which has experimental work centralized at Purdue. Both speakers presented many slides illustrating various new developments in turf culture.

Prof. Pierre A. Miller presented the results of the past season with various turf herbicides. The advisability of high nitrogen feeding to reduce dollar spot, and the remarkable greening of the grass with fungicides containing iron, were highlights of his talk.

Dr. 0. R. Lunt of the Department of Irrigation and Soils discussed soil compaction. Mr. Charles Wilson of the U.S. Golf Association Green Section figured prominently on both programs. Prof. Boysie E. Day of the Riverside campus gave an excellent presentation on the present status of herbicides on the Los Angeles program. Dr. Robert M. Hagan of the Davis campus presented some startling new findings on irrigation of grasses.

The Los Angeles conference was held on October 6 and 7 at the Riviera Country Club. Attendance was a little lower than at recent previous conferences, but the interest was well sustained. The fields of interest represented by those attending were very broad.

The Northern California Turf Conference was held at Oakland on October 9 and was, in our opinion, the most successful conference yet held in California. In the afternoon, four groups representing the chief interests in turf culture were given the opportunity of asking questions of four different rotating panels. This proved to be a most successful feature of the conference. This idea was suggested by Mr. Tom Mascaro of the West Point Lawn Products Company. It is to be hoped that facilities may be found that will permit the trial of this idea at future conferences in Los Angeles.

A visit to the experimental turf plots of the Oakland Park Department showed an outstanding performance of Merion bluegrass, and some others.

The evening session consisted of a banquet at the Claremont Hotel at which Mr. Marston H. Kimball, Extension Ornamental Horticulturist, presided and summarized the chief new facts presented during the day. Mr. 0. J. Noer presented a turf travelogue of the U.S.A.

These annual turf conferences have helped to maintain a steady interest in turf research in all parts of the state.

EVENING MEETINGS OF THE ADVISORY COMMITTEE

The January 19 meeting of the Advisory Committee will be held at 6:00 P.M. at the Rancho Golf Course Clubhouse on Pico Boulevard, West Los Angeles. All meetings are open to the public and those who wish to attend should notify Mr. F. W. Roewekamp, Room 305 City Hall, Los Angeles 12, so that reservations may be made for dinner. Mr. Roewekamp's secretary may be notified by calling Michigan 5211, Extension 2254. This meeting will be sponsored by representatives of the seed trade.

The February 16 meeting will be sponsored by the Athletic and Recreational Turf Association. It will be held at the Brookside Golf Course Clubhouse near the Rose Bowl, Pasadena, at 6:00 P.M. Reservations should be made in advance for dinner.

On March 16 the Advisory Committee will meet at Eaton's Restaurant in Arcadia, under the auspices of the Los Angeles State and County Arboretum, at 6:00 P.M. Extensive turf experimentation is being conducted by this institution. Reservations for this dinner should also be made with Mr. Roewekamp.

Tentative arrangements have been made for the Southern California Golf Association to sponsor the April meeting. The California Association of Nurserymen will sponsor the May meeting, and the June meeting is to be held under the auspices of the California Fertilizer Association.

NEW EXTENSION COURSES

The success of the first Weed Control course given at U.C.L.A. in the winter of 1952, under the auspices of the Extension Division of the University of California, has brought many requests that it be repeated. Accordingly, it will be given again beginning February 2, 1953, as shown in the schedule below.

In addition to weed control, considerable interest was evidenced for similar, practical presentations in the fields of Soils and Agricultural Botany, and therefore courses in the latter two subjects will also be presented. We believe that these will be of great interest to all of those concerned with turf culture. The specific details of subject matter, dates, time and place of meetings are as follows:

THE UNIVERSITY EXTENSION OF THE UNIVERSITY OF CALIFORNIA

Announces three courses of general interest to those in the following professions: greenskeeping superintendents, grounds maintenance men, city, park and athletic field

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RESEARCH ADVISORY COMMITTEE FOR THE EXPERIMENTAL PROGRAM IN TURF CULTURE

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California Association of Nurserymen

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Los Angeles County Parks & Recreation Department

HONORARY MEMBERS:

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Agricultural Extension Service
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Prof. H. B. Musser
Department of Agronomy
The Pennsylvania State College

Mr. 0. J. Noer, Agronomist
Milwaukee Sewerage Commission

Mr. Charles G. Wilson, Regional Director
U. S. Golf Association Green Section

V. T. STOUTEMYER ON SABBATIC LEAVE

V. T. Stoutemyer, Chairman of the Department of Floriculture and Ornamental Horticulture, U.C.L.A., will be on sabbatic leave for six months beginning January 1, 1953. He will devote this period of time to writing and investigational work. The acting chairman of the department will be Dr. B. Lennart Johnson.

RECENT GIFTS

American Cyanamid Company,
New York
400 lbs. granular Aero-Cyanamid
10 lbs. potassium cyanate
13 lbs. potassium cyanate (5% dust blend)
4 lbs. Aerotil soil conditioner - wettable concentrate
4 lbs. Aerotil soil conditioner - dry form

California Spray-Chemical Corporation
Richmond, California
1 lb. Ortho-Til
2 lbs. Ortho-side 406

Northrup-King & Company
Los Angeles
1 bag Terf grass seed

Milwaukee Sewerage Commission
Milwaukee
100 lbs. Milcyanate

Vitamin Institute of Hollywood
North Hollywood, California
1 qt. Trans-all (Superthrive)

Pacific Toro Company
Los Angeles
Servicing of equipment

Members of the Athletic and Recreational Turf Association met at the C. W. Pierce School of Agriculture on the morning of Thursday, September 11, 1952. After a brief business and educational program, in which several members of the staff of the University of California at Los Angeles participated, the group inspected the athletic playing fields of the college. Alta fescue and Kentucky bluegrass were used and had produced outstanding turf.

The group toured the horticultural facilities and some of the new buildings, and then visited the playing fields of the Canoga Park High School, where an excellent bermudagrass turf had been produced.

EVALUATIONS OF FESCUES AND BLUEGRASSES

V. T. Stoutemyer

Dept. of Floriculture and Ornamental Horticulture
University of California - Los Angeles

ALTA FESCUE - This is one of the best all-year turf grasses in our collection. It is normally high resistant to invasion of crabgrass, bermudagrass, or various broad-leaved weeds. This grass, mixed with bermudagrass and with Kentucky bluegrass, is now the standard recommendation for sports fields in Southern California.

Our oldest plot of Alta fescue was suddenly seriously invaded by crabgrass late in the summer, an occurrence which we are unable to explain. It may possibly be due to too close mowing over a long period of time.

The chief disadvantages of Alta fescue are relatively coarse texture and also the rapid growth requires somewhat frequent mowing. The excellent winter color and growth of Alta fescue make it a useful grass which might profitably be used on large scale industrial lawns and children's play areas about the home. Alta fescue seems to stand clipping at three-quarters inch fairly well for long periods of time in California.

Alta fescue seed from sources we have used produces grasses of widely differing vegetative types, in contrast to the Kentucky 31 and Goar's fescues, which are quite uniform.

ALTA FESCUE 144 - This selection, available in California, appears to be excellent in every way at the end of the first season.' Continued testing will be needed to determine whether or not it is actually superior to Alta fescue.

KENTUCKY 31 FESCUE - Our tests indicate that this grass is superior to Alta fescue in vigor and uniformity, and is the finest available grass of this type. However, the greater cost of the seed may be a deterrent to a wider use of it at the present time. These observations may not be valid for northern California, since in other parts of the country the superiority of Kentucky 31 fescue seems to become apparent as one goes southward.

GOAR'S SELECTION OF TALL FESCUE - This very distinct type of tall fescue was a University of California introduction, produced by Mr. L. G. Goar, while in charge of the Meloland Station in the Imperial Valley. This grass has a somewhat more attractive texture than the other tall fescues, and does not produce as much herbage. The vigor is less and the turf seems to be more susceptible to invasion by other species. Probably it is inferior to Alta fescue or Kentucky 31 fescue for athletic fields. It should be tried in mixtures, particularly as a replacement for meadow fescue in the meadow fescue and redtop mixture now used in the Los Angeles park system. It has the advantage of disease resistance.

Although this grass was developed as a grass for hot, desert areas, it has been at its best during the spring rather than during the summer in West Los Angeles. Plots watered only once every two weeks have performed almost as well as those watered weekly. Our oldest plots are two seasons old.

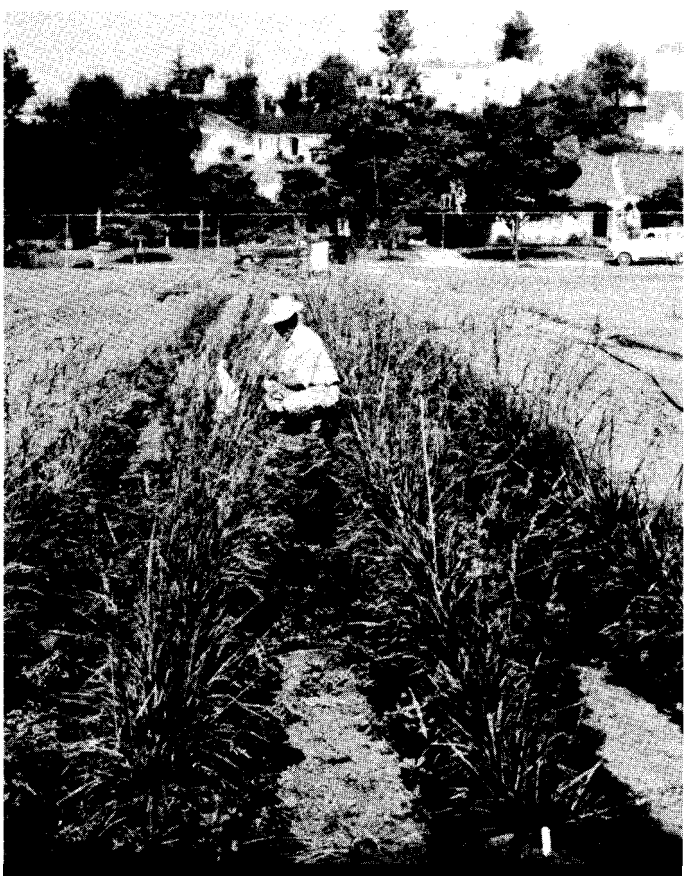
This grass was derived from a strain imported. originally from Hungary and thus has no close relationship to Alta fescue.

DELTA BLUEGRASS - A plot of this grass has been heavily invaded by crabgrass and does not exhibit any particular merit. We believe that this grass is about the same as Kentucky bluegrass. Tests at the Los Angeles State and County Arboretum show this grass to much less advantage than our own trials. This is a Canadian introduction, for pasture use, but no real value for turf has been established.

ARBORETUM BLUEGRASS - This bluegrass seems a little deeper in color than Delta bluegrass. Tests at the Los Angeles State and County Arboretum seem to indicate a very definite superiority over Delta bluegrass. Regardless of possible merits which may be claimed for these two grasses, neither have shown any of the outstanding qualities of Merion bluegrass.

F-64 FESCUE - This is a typical red fescue and a new introduction of Prof. H. B. Musser. It is difficult for us to evaluate grasses of this group since on the fine textured Yolo loam of our turf plots, they tend to thin out during the summer and recover in the fall. Doubtless on a sandy soil or decomposed granite, with careful watering, these grasses would make a better showing.

FX CREEPING FESCUE - A typical creeping red fescue which is difficult to evaluate because of the unsatisfactory behavior of these grasses during the summer on our soil. It was closely similar to F-64 fescue in limited trials during the past summer.



Single plant cultures of various strains of Tall Fescue in order to determine uniformity within the type.

TURF FUNGICIDE TRIALS - U.C.L.A. 1952

P. A. Miller and 0. R. Lunt

Department of Plant Pathology, and
Department of Irrigation and Soils

In cooperation with Dr. 0. R. Lunt of the Department of Irrigation and Soils, the 1952 turf fungicide trial plots were superimposed on randomized fertilizer plots. The same areas of Seaside bent and Highland bent turf were divided into replicated plots, to which nitrogen as ammonium sulfate was applied at monthly intervals at rates of 6, 12 and 24 pounds of nitrogen per 1000 square feet per year. The fertilizer plots and the fungicide plots were both replicated four times. The fertilizer applications were begun in March. The trial plot areas had received three applications of fertilizer before the fungicidal spray treatments were started in June.

The first fungicide sprays for dollar spot control were applied on June 10 and were repeated at two-week intervals until August 19. 'Dollar spot counts were made two weeks after the first spray treatment and at two-week intervals thereafter, and finally on October 30 to learn the comparative residual protective value of the various fungicides.

The results recorded as the average number of dollar spots per 25 square feet of Seaside bent turf show that Vancide 51 and Tersan were least effective for the control of dollar spot. Although all the other fungicides in this trial were of approximately equal value in the control of dollar spot, they might be listed in descending order as follows: Cadminate, Calo Cure, PMAS, Mercadmine, Actidione, and Calo Clor.

The relation of nitrogen fertilization level to the severity of dollar spot attack is most striking. Fifteen pounds of nitrogen per year per 1000 square feet, applied at monthly intervals, is considered to be a proper maintenance level for turf in this area. The results of these trials show that, even without fungicidal treatment, dollar spot attack was most severe at the low rate of nitrogen application of 6 pounds per 1000 square feet per year. At the 12 pound rate of nitrogen fertilization, the attack by the dollar spot fungus was appreciably reduced, and at 24 pounds of nitrogen rate of application there was a further marked reduction in dollar spot injury to the turf.

High nitrogen fertilization alone may greatly reduce the severity of dollar spot attack, but will not prevent or control the disease without the aid of a fungicide which is effective in the control of the fungus.

The results of these trials show clearly that these fungicides are much more effective when nitrogen was applied at the rate of 12 and 24 pounds per 1000 square feet per year. At these higher rates of nitrogen fertilization, five of the eight fungicides under test gave complete control of dollar spot throughout the trial period.

Dollar spot counts made on October 30, ten weeks after the last fungicidal spray treatment, showed that Cadminate, PMAS, and Mercadmine had the greatest residual effect in retarding the recurrence of disease.

Turf injury rated as severe (3-4) was noted throughout the trial period on the plots sprayed with Vancide 51 and PMAS. 'Slight injury (l-2) was observed in the Calo Clor plots. Both Calo Cure and Ferrated Actidione spray treatments produced an abrupt change in color of the turf to a dark green. A chlorosis due to lack of iron, previously unsuspected in our turf plot area, was thus revealed.

Additional data was obtained on the relation of air and soil temperatures to the severity of dollar spot injury to turf. The number of hours of air temperature above 68 F. or of soil temperature above 78' F. appear to have a direct relation to the incidence of severity of dollar spot.

NEW EXTENSION COURSES

(Continued from page one)

personnel, highway maintenance personnel, horticulturists, homeowners, landscape contractors, nurserymen, flower and vegetable growers, ranchers, pest control operators, farm equipment and chemical dealers and salesmen.

In these courses the practical applications will be stressed with overall emphasis being placed on the plant and the cultural requirements which bring about the best plant growth responses. Economic aspects of the problems involved will be brought out whenever possible.

I -- WEED CONTROL 823AB, meeting from 7:00 to 10:00 p.m., for ten weeks beginning Monday, February 2, 1953, in room 29, Physics Building, U.C.L.A. campus. Fee: $18.

Problems to be studied include: identification, ecology and physiology of weeds; modern agricultural chemicals and herbicides used in weed control; dosages, methods of application, spray rigs; specific methods of weed control in truck and field crops, flower crops, turf, range land and industrial areas; use of plant growth substances for other horticultural purposes.

II -- SOILS 824, meeting from 7:00 to 9:00 p.m., for ten weeks beginning Tuesday, February 3, 1953, in room 29, Physics Building, U.C.L.A. campus. Fee: $12.

Problems to be studied include: agricultural characteristics of soils; fertilizers; soil amendments; methods of irrigation; water quality; mineral nutritional requirements of plants; soil-water-plant relations.

III -- AGRICULTURAL BOTANY AND PLANT PHYSIOLOGY 825AB meeting from 7:00 to 9:30 p.m., for twelve weeks beginning Wednesday, February 4, 1953, in room 29, Physics Building, U.C.L.A. campus. Fee: $18

Problems to be studied include: growth and development of plants (i.e., the root, stem, leaf, flower and fruit); plant physiological processes and responses; cultural requirements for good plant growth; methods of plant propagation; plant protective measures against insect and disease pests.

These courses will be taught by Jesse D. Skoss, Ph. D, Consulting Agronomist.

This publication "Southern California Turf Culture" is sponsored and financed by the Research Advisory Committee. Communications should be sent to the Secretary, or to Dr. V. T. Stoutemyer, Department of Floriculture and Ornamental Horticulture, University of California, 405 Hilgard Avenue, Los Angeles 24, California.