## Southern GA Reports Tifton Turf Research Progressing

Southern Golf Assn. soliciting funds for carrying on work at Georgia Coastal Plain Experimental station, Tifton, Ga., in cooperation with USGA Green section, has presented an impressive report of projects in operation under direction of Dr. George W. Burton at the station.

Already experiments show promise of considerable value in improvement of southern golf turf and solution of problems that now make southern course maintenance at high level a difficult job.

The report of turf projects under way at Tifton follows:

1. SEED PRODUCTION IN TURF GRASSES:

a. Centipede grass seed production— Studies begun in 1946 suggest that over 100 pounds of good seed can be produced per acre during one season with the proper treatment. The best fertilization and management treatment in 1946 increased the seed yield over the untreated grass more than threefold. The effects of burning, mowing, grazing, and various rates and dates of nitrogen application are being studied. There are 280 plots devoted to these studies.

Centipede grass offers great promise for turf in the South because it will thrive on soils of low fertility, it can be cut closely for lawns and fairways, it is very tolerant of drought, insects and diseases, and it resists weed invasion to a high degree. Expensive vegetative reproduction, necessary because of lack of seed supplies, will be reduced in favor of cheaper establishment from seed. Lawns in Tifton have been grown satisfactorily from seed.

b. Bahia grass seed production-

This grass is probably best suited for airports, road shoulders, and similar heavy duty assignments. Studies conducted for a number of years with this grass indicate that burning and adequate nitrogen fertilization can increase seed yields in old sods 10 to 15 times.

Bahia grass may find a place in golf course roughs in the South by virtue of its ability to grow under relatively unfavorable conditions.

2. DEVELOPMENT OF SUPERIOR TURF GRASSES:

a. Bermuda grass-

Over 100 Bermuda selections from various

golf courses and the breeding program at Tifton are being tested under green and fairway conditions. Although just started a number of these promise to make better turf for both greens and fairways than common Bermuda grass.

b. Centipede grass-

A small start has been made in the study of the variation within this species. Better seed production is the main objective.

c. Bahia grass-

Progress is being made in the development of fine, low growing strains of this species. The fine-leaved, low-growing strains of Bahia grass appear to have promise for golf course fairways and perhaps tees.

3. EFFECT OF VARIOUS NITRO-GENOUS FERTILIZERS UPON SEA-SONAL GROWTH OF CENTIPEDE GRASS:

This includes the study of various Uraform compounds and lead to the discovery of the most effective and most economical sources of N for turf.

4. INSECT CONTROL IN TURF:

Various rates of DDT, Benzene Hexachloride and lead arsenate were applied to Centipede turf in 1946 and their effects on worm population are being studied. It is hoped that studies on mole cricket can be instituted but we have not found heavy enough infestations to date at Tifton.

5. PRODUCTION AND STERILIZATION OF ORGANIC TOP DRESSING MA-TERIAL:

144 different combinations of soil, sawdust, lime, sewage sludge, fertilizer, cyanamid, and uramon have been prepared and are being composted Their value as top dressing materials will be studied by growing grass in them and making a number of chemical analyses of them. The completion of this study depends upon adding personnel. Some mixtures of sawdust and sewage sludge look very promising. Mixing 15 pounds of cyanamid with every cubic yard of soil in an open compost bin killed all weed seeds in the soil.

6. LIME AND FERTILIZER REQUIRE-MENTS OF SOUTHERN TURF GRASSES:

A beginning was made on this important problem in 1947 but cannot be carried far without additional help.



SOUTHERN CALIF. SUPERINTENDENTS INSPECT OJAI

Southern California Golf Course Supts. Assn. looked over the completed first 9 and second 9 nearing completion at beautiful Ojai Valley CC as guests of Ojai's supt., Paul Adessi. The inspection tours and meetings of the association's 61 members are considered by supts., club officials and members one of the most valuable contributions made in recent years to golf in the sunkist sector. Southern California supts', campaign to get turf research established at UCLA finally scored with cooperation of George Armstrong, pres., SCGA, and C. C. Simpson, chmn., green section of the SCGA. The campaign begun in the administration of Bill Stewart of Hillcrest, as the supts', president and achieved initial success this year under administration of Wm. Beresford, Los Angeles CC supt. A check for \$5790 has been sent to UCLA by the Southern California GA. Turf research plans call for a \$6000 yearly program for 5 years. Clubs and other turf interests have committed themselves to monthly contributions which will be collected by SCGA.

7. HASTENING TRANSITION FROM RYE GRASS TO BERMUDA AND VICE VERSA:

It is hoped that this problem may receive some study in the Winter and Spring of 1948. Here again more help is needed.

8. ESTABLISHMENT OF SOUTHERN TURF GRASSES:

The part 2, 4-D may play in this problem was studied in a limited way in 1947. A summarization of some of the findings is being published in Timely Turf Topics. Other materials and cultural methods should be tested. More of this work could be conducted with adequate personnel.

9 EFFECTIVENESS OF VARIOUS CHEMICAL FUNGICIDES AND HERBI-CIDES UPON SOUTHERN GRASSES SHOULD BE INVESTIGATED:

Such studies cannot be conducted with the present limited personnel.

Funds already contributed or pledged to operation of the Tifton golf turf program total \$4960 of which \$800 is from the USGA Green section, \$400 from the Southern GA, \$1000 pledged by Atlanta Athletic club, \$150 from Florida GA, \$100 from Georgia GA, \$100 from Pinehurst, Inc. and \$10 from Augusta Woman's National Assn.

The Southern GA points out that USGA Green section contributions can be increased only with an increase in USGA membership in the region. Tribute is paid to Fred Grau of the Green section for his work with Dr. Burton in getting the Tifton experiments organized and advanced.

Further details of the Southern GA campaign for better golf turf and fewer serious problems of turf maintenance in the region may be secured from Col. Lee S. Read, sec.treas., SGA, 315 S. 5th St., Louisville 2, Ky.

## Southern Turf Problems on Docket at Nashville

Southern Turf Assn. conference at U. of Tennessee Agricultural Experiment station, Knoxville, Jan. 6 and 7, will bring an array of experts before a large attendance from Tennessee and neighboring states. J. K. Underwood, assoc. agronomist of the station, arranged the program.

Among featured speakers will be Dr. Eric Winters of the U. of T. College of Agriculture, O. J. Noer, Fred Grau, J. A. DeFrance, Glenn W. Burton and Charley Danner. Danner, sec. of the Southern Turf Assn. and pro-supt., Richland CC, Nashville, will talk on converting winter greens to summer greens and vice versa. De-France will tell of crabgrass control. Noer will speak on water management. Burton will present the story of turf research for the southeast. Winters will speak on turf in relation to Tennessee soil conditions.

Time for discussions and a round table session is scheduled.

The meeting will conclude with the annual meeting and banquet of the Southern Turf Assn. at the Andrew Johnson hotel.