

not only be limited by cost, but also by the effect of the chemicals on grass when treated sand is driven onto adjacent putting green turf by an "explosion-shot". As this was not determined in this study, further tests are planned in this respect, along with additional work on various rates of application. Leaching away of the chemicals in the sand traps, as well as continuous raking are other factors that have a bearing on the effectiveness of the chemicals.

It should be understood that the above report is based on preliminary testing of the chemicals. Some of the chemicals and rates used appear practical. The results are given as a suggestion of what chemicals might be effective and as a guide for further testing under actual conditions.

Certainly, the effective use of chemicals for purposes mentioned above will save many hours of hand labor and expense.

NOTE: The author would appreciate the benefit of any suggestions or experiences of others in the chemical method, or any other method, for controlling weeds in sand traps.

Southern California Holds Third Turf Conference

Southern California third annual conference on turf culture, April 30 and May 1, held its first session on the turf plot at the University of California at Los Angeles, giving visitors an opportunity to see comparative trials of the many new and standard turf grasses under various cultural treatments. More than 200 persons from various parts of Southern California attended the two-day meeting.

The meeting was opened by Dean Robert W. Hodgson, head of the Los Angeles division of the University of California College of Agriculture. Prof. H. B. Musser, Pennsylvania State College, explained the operation of his program, one of the oldest and largest turf research programs in the United States. Prof. Musser also discussed control of weeds.

Dr. F. V. Grau, Director, USGA Green Section, described new improved turf grasses, including Zoysia Z-52, U-3 bermuda grass and Merion bluegrass, and discussed their use in combinations of warm and cool season grasses. He also reviewed turf aeration.

O. J. Noer showed many color slides illustrating maintenance methods and solutions of turf problems. Dr. Robert Hagan of the Division of Irrigation on the University of California's Davis campus, discussed the fundamentals of watering turf grasses.

John E. Gallagher of the University of California Division of Floriculture and Ornamental Horticulture on the Los An-

geles campus presented results of experimental trials of herbicides and fertilizers on the turf plots at UCLA.

These five speakers earlier conducted a broadcast panel discussion on turf culture for Armed Forces Radio, with emphasis on the military aspects of turf.

Additional speakers on turf subjects from UCLA were Prof. Pierre A. Miller of the Division of Plant Pathology, who discussed turf diseases and their control by fungicides, and Prof. V. T. Stoutemyer, chairman of the Division of Floriculture and Ornamental Horticulture, who explained the purpose of some of the experimental grass plots.

Another panel discussion on trees and turf at the morning session of the second day evoked many questions. This panel was conducted by Fred W. Roewekamp, city Forester of Los Angeles, Prof. Pierre A. Miller, and Dr. Mildred E. Mathias of the U.C.L.A. Botany Department. William H. Johnson, president of the National Golf Course Superintendents Assn. presided at this meeting.

At the final afternoon session, John J. McElroy of the Agricultural Extension Service on the Berkeley campus of the University of California described their methods of operation and the possibility of assistance to those groups concerned with recreational and ornamental turf.

WHAT PROS SHOULD KNOW

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length, each $\frac{3}{8}$ inch deflection, upright or flatter, is equal to a 1 degree change in lie.

Hook Variations

The next item on the order is "not too much hook." The factory has means of checking and measuring hook, but the amount of hook on a wood club varies with practically every pro, that is, as far as personal opinion goes. A straight face to Cary Middlecoff is 2 degrees open to the factory. A straight face to Skip Alexander is 1 degree hook to the factory. The standard hook on a driver and brassie is $\frac{1}{2}$ degree, $\frac{1}{4}$ degree on the No. 3 spoon, and on the No. 4 spoon 0 degree. This is a perfect example as to the importance of the home professional to the factory. It is understandable that the touring pro uses a wood club faced much more open than the club you would recommend for Mr. Average Golfer. The exact amount of hook necessary to make a club more playable, or the lack of hook, comes to us directly from your recommendations.

That last item on the order was "grip a little oversize." The factory uses a ladies' gauge, a men's standard gauge, slightly oversize, and full oversize. Reducing these descriptions to simple figures, the difference between each gauge is $1/32$ of an inch in diameter. "A little