FIELD TESTING AND EVALUATION
BOB O'LINK COUNTRY CLUB

During the past year, as Assistant Superintendent at Bob O'Link Golf Club. I have been fortunate to be able to work with several universities and corporations, field testing their various products and developments for the turfgrass industry.

As we all know, many years of research and millions of dollars are spent with one goal in mind - IMPROVED TURF. Field testing of new products is one of the final steps prior to marketing.

We are currently field testing and evaluating two new varieties of creeping bentgrass for use on greens and/or tees. The first variety is "Evansville" creeping bentgrass. At the present time, we have 5,000 sq. ft. of this variety established and it is maintained at a 13/64ths of an inch height of cut. This vegetatively propogated variety has several advantages over existing bents used as putting green surfaces.

"Evansville" has a very fine leaf blade and has a greatly increased density as compared to existing varieties, establishing a dense tightly knit turf. In existing plots, "Evansville" appears to choke out Poa annua impurities which developed after initial stolonization. When managed properly on a low fertility program, thatch development is held under control while the grass maintains an above average color rating and an average growth rate. Our plots received only 2 lbs. of actual nitrogen during the past growing season. The only disease present in areas not treated by a fungicide was large brown patch but it did not appear to be a major problem.

Warren's Nursery has received fifty plugs of "Evansville" and over the winter they will increase these plugs on the west coast to produce enough stolons for a 5,000 sq. ft. area to be planted in the spring. A 1,000 sq. ft. test plot will be established on our #1 green in 1978 to evaluate this new variety under playing conditions. "Evansville" bent gives us all indications that it will make a fine putting surface, both fast and true.

The second field test involves PBCB which is a new variety of creeping bentgrass developed through the breeding program of Dr. Joe Duich at Pennsylvania State University. This variety originates from a four parent polycross giving it a broad base of factors resultant in several advantages over its predecessor, "Penncross" creeping bentgrass. In comparison with "Penncross", PBCB has a reduced vigor - resulting in lower levels of thatch development and overall a more manageable turf for the golf course superintendent. The leaf blades of PBCB are finer than those of "Penncross" with increased turf density and a tighter putting surface. A greater resistance to both dollar spot and large brown patch is evident in existing plots.

PBCB was initially developed in 1965 by Dr. Duich and after 12 years of testing, he says that the variety looks exceptionally good to date. Presently, Jim Holmes has 9 greens in play in Oklahoma.

At Bob O'Link Golf Club, we have established a 15,000 sq. ft. nursery of PBCB for evaluation at a 13/64ths of an inch height of cut. Seeding took place April 15, 1977 at the rate of one pound per 1,000 sq. ft. Following several applications of topdressing with a fine sand, the height of cut was gradually reduced to the present 13/64ths of an inch. Our plot received 4½ pounds of actual nitrogen per 1,000 sq. ft. during the past season.

In order to evaluate this new variety properly, we plan to sod a 1,000 sq. ft. area on our #1 green for the 1978 season. A comparison then may be made between (1) the existing putting surface, (2) PBCB, & (3) "Evansville".

Dr. Duich has informed us that PBCB will be released in 6 to 8 months to the 12 Penncross growers and each one will develop 5 acres for seed production. It is anticipated that seed will be available after January 1979.

In conjunction with Rhodia Inc., we are currently testing a new fungicide - Chipco 26019. This product is a broad spectrum fungicide that is effective against summer turfgrass diseases and shows promise against winter diseases as well. Rhodia expects to obtain an experimental label from the Environmental Protection Agency in 1978.

During the past season, our #1 green received 16 total fungicide applications. Twelve of these treatments were made with "26019" at the rate of 2 oz. per 1,000 sq. ft. A check plot was established as well. Applications of "26019" were made at 7-12 day intervals dependent upon weather conditions. Using a preventative program, this product equalled the level of disease control offered by comparable products on the market today. Of particular interest in our observations though, was the extended residual effect of the fungicide. Disease control was extended an additional 3 to 5 days with "26019".

Additionally, a particular situation arose at our golf course this past summer during the first week of August which was a period of excessive heat and humidity. Two isolated areas on our #8 green became infected by an unknown pathogen which resembled and had characteristics of both Pythium and Helminthosporium. None of our regular fungicides had any effect on the disease. With the permission of Rhodia, we applied Chipco 26019 at the rate of 2 oz. per 1,000 sq. ft. and saw immediate improvement, with no further disease incidence of that type for the remainder of the season.

With few new fungicides being made available to the superintendent, to combat turfgrass disease, Chipco 26019 appears to be quite promising, while field testing still continues.

The DuPont Corp. tested a new development in fungicide packaging with us this year. The new water soluble container (tested with Tersan 1991) eased chemical handling. The individual 2 lb. soluble packets were dropped into our 300 gal. spray tank and dissolved within 30 seconds. There was no problem whatsoever with nozzle clogging and no residue was visible in the spray rig strainer. The chemical applicator avoids direct contact with the fungicide in mixture preparation, and eliminates disposal of packaging in accordance with Environmental Protection Agency regulations.

The Upjohn Co. conducted a field test on a fairway fungicide spray program. Acti-dione TGF was used alone and in combination with ferrous sulphate. Preliminary results showed improved color on fairways treated with the ferrous sulphate combination, but under supreme stress conditions, a slight burn appeared on the leaf tips of the Poa annua plants. This appeared in areas where the fairways were mowed immediately following the application in atmospheric conditions of extreme heat and humidity. The slight discoloration of the turf was evident only on the fairways treated with the ferrous sulphate combination and only during these extreme stress periods. Disease control was identical on both groups of fairways. The ferrous sulphate was applied at the rate of 1½ lbs. per acre. Further evaluations will be made in 1978.

Through educational seminars and publications, research results can keep superintendents in touch with industrial and university developments in the turf field. It is important however, that field testing continue and that these new developments are put into practical application.

Fifty years ago, greenkeeping was more of an art than a science and consisted primarily of trial and error. Today, turf management still remains an art but is predominately a science, with a greater emphasis on trial and a lesser amount of error, through research and testing.

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