

FROM THE DIARY OF CEC KERR

The other day while visiting with Pete Vandercook, I suddenly exclaimed, "Pete, I visit golf courses throughout the United States — leading distributors, outstanding university scientists, and green house growers. I learn something new each day from each individual and still get paid from Mallinckrodt. I feel almost guilty drawing a pay check." It's great to enjoy your work. I believe you superintendents enjoy your work. It shows by the many improvements you continue to initiate in your program.

I have had the privilege of speaking on Public Relations to 1,400 superintendents at Dr. Joseph Troll's Massachusetts Turf Conference telling of fine practices of Bruce Williams, the greens aere aerification program of Bruce Searing, James John's rustic name plates identifying each employee's parking place, John Ebel's well-maintained shop and so many other activities by you superintendents here in Chicago.

I have had the chance to hold small group seminars throughout the midwest meeting at Illini Country Club and sharing ideas with men such as Mike Vogt, well trained by Mike Bavier, and superintendents in Ohio led by Paul Mechling and Warren Bidwell's son, Walter Simon, President of Northwestern Ohio Superintendent's Association.

The rare opportunity of attending the recent Chicago District Golf Association Green Seminar and hearing professional talks given by our own members, such as Carl Hopphan, discussing turf update with Dr. Wehner's water improvement studies, excellent discussion of sand topdressing presented by Dave Ward and the mowing studies conducted by Bruce Williams and Oscar Miles.

I have had the the pleasant task of speaking throughout the country about our new product, Vorlan, which was developed eight years ago in Germany. In eight years of usage, no resistant dollar spot has developed. This product is also approved for Fusarium nivale, leaf spot and red thread. We have seen 39 days control of dollar spot with Vorlan applied at 1 oz/1,000 sq. ft. by Tom Rodems at Kankakee Country Club. Seventeen university specialists have tested Vorlan showing superior dollar spot control to most competing products. It's fun to sell a winner!

Recently Bill Small, Dr. Fickle, Dr. Vargas and I visited snow mold plots at Boyne Highland Golf Course in Northern Michigan. Calo-clor was excellent at 3 oz/M ft₂ and is still the premier product along with Calo-gran. Scott's FF-11, a mixture of PCNB and 12-3-3 fertilizer, performs well. The addition of fertilizer greatly masks damage normally attendant with PCNB usage.

The data collected are controlling *Typhula incarnata*, *typhula ishikariensis* and *Gerlachia nivalls*. Very little snow mold activity has developed in the midwest except in Northern Michigan. Illinois, Wisconsin and Minnesota have been blessed with little snow mold activity.

Many superintendents in the midwest have been mowing fairways with the Toro 84 and picking up the clippings — reporting intense labor but resulting in fine turf.

Jacobsen HF5, the new generation of lightweight hydrolic fairway mowers, has made its debut at several prominent golf courses in the Chicago area. This mower has a lighter footprint than a riding greens mower.

There are at least fifteen courses in the midwest states that are aerifying fairways with a Ryan Greensaire II. This is an expensive labor program and yet the end result may justify the means. The development of the Terra 200 by Ray Christopherson may be an improvement. Aerification of fairways is a must!

The weather has been in the fortys during April with intense wind. Greens are drying out. They are difficult to rewet. Poa is yellow. Washington bent has been purple. The sand top-dressed greens have experienced severe localized dry spots. Poa annua is standing still throughout the midwest. I just visited with Wayne Otto of Ozaukee Country Club, who is praying for warmer weather and warm rain. Aqua Gro is helpful in rewetting sandtop dressed greens. Thank goodness it is starting to rain!

Oscar Miles, Superintendent Butler National, experienced cold weather Pythium on his new Penneagle greens. With the help of Dr. Wilkenson and Cindy Brown of Michigan State University, both scientists isolated 100% cool season Pythium. Oscar is a true professional! He realizes the need of seeking aid from trained pathologists. Oscar applied 3 oz. of Upjohn's Banol to 10 gallons of water per 1,000 sq. ft. to literally drench the crown.

Cool weather Pythium and cool weather brown patch have been very common this spring. In the past these diseases seemed to occur only during hot humid weather. Dr. Wilkenson has observed cool weather brown patch in Illinois this spring. Symptoms on Kentucky blue grass appear as circular patches of light tan or brown grass. The centers may give the appearance of a "frog-eye" similar to Fusarium blight. Leaf lesions may occur like Rhizoctonia brown patch during warm weather. In many cases, reddening of the leaf tips is associated. Dr. Wilkenson reported another disease late last July to early September on bluegrass thatched lawns called yellow ring in the family *Basidiomycetes* and species *Trechispora* spp. The disease appears as a yellowing in the grass in a ring pattern. It hasn't occurred yet this spring.

Several superintendents have excellent sand topdressing programs. Thursday I visited an outstanding program of Jim Mitter's at Calumet Country Club.

It has been an education to observe the rebuilding of greens in the Chicago area after the C-15 problem. Several different programs have been followed. Julius Albaugh fumigated and sodded the entire golf course to Penneagle at Westmoreland. Pete Leuzinger at St. Charles Country Club fumigated, stripped 3/8" off, verticut and then seeded to Penneagle. Bruce Birchfield, formerly of Hillcrest Country Club, fumigated, stripped, aerified and seeded to Penneagle. Dudley Smith of Silver Lake Country Club fumigated, stripped and sodded to Penn-cross bent, doing half of the golf course at a time to keep the course in play.

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1983 CHAMPION The Pleasure of Victory

Golf Course Superintendent, Peter N. Voykin, from Twin Orchard Country Club was victorious in winning the Second Annual Charity Gin Tournament. The fund raiser was held at Hackney's Restaurant in Wheeling, Illinois.

Brother Peter easily breezed through his first few opponents with keen wit and strategy. We will not mention any names, but Peter's first opponents played as if they were playing FISH. In the final round it was Brother Peter against, "Quick Call", Mike Bavier. In the end, Peter's great skill, technical knowledge, and mostly LUCK had prevailed.

Many thanks to those who found the time in their heart to participate in this special fund raiser, and especially our friends at Hackney's Restaurant. Approximately \$1,000.00 was raised and donated to the Merry Ville Academy. Paul Voykin, typical of himself, lost in the first round.

Submitted by
Paul N. Voykin, Chairman

NEWS FROM THE NORTHWEST

Dr. William A. Meyer

Turf-Seed, Inc., Hubbard, Oregon

Of the 8 winters that I have experienced in the Willamette Valley, this past one set a record for being the mildest and wettest. There were only a few nights where temperatures got into the 20 degrees F. and since September 1, 47 inches of rain fell in 1/4 to 1/2" increments.

The 1983 grass seed crop is about 2 weeks ahead of normal years. Of course we could still end up with the same harvest dates with a few extra cold and wet weeks. This would then make our weather worse than what I have heard about the Chicago area.

The mild wet winter has caused the rust diseases on the seed crops of turf-type perennial ryegrass and Kentucky bluegrass to build up very rapidly this spring. These diseases can be controlled with fungicide applications costing between \$50 and \$100/acre. If they are not controlled the seed yield losses on most varieties which are susceptible can be up to 95%.

This heavy rust year should be a good challenge for the new stem rust resistant perennial ryegrass variety Manhattan II. We have been working in cooperation with Dr. C. Reed Funk of Rutgers University to develop this improved Manhattan for the past 8 years. Along with having much better stem rust resistance than the original Manhattan, it also has shown better mowing quality, better summer performance, a dwarfier growth habit and a much higher tiller density.

Improvement projects have also been in progress on Citation, Birdie and Omega perennial ryegrass, which have been performing well in our CBS blend. The varieties Citation II (tested as 282) and Birdie II (tested as 2ED) have shown improved turf qualities, stem rust resistance and recently were reported to contain a high level of the endophytic fungus *Epiclloe typhina* (E.T.).

This endophytic fungus grows between the cells of ryegrass tissues and can be found in all above ground portions of the plant. Plants containing the fungus look and grow normally.

The presence of this fungus within the ryegrass and many other cool season grass species was first reported in New Zealand in the 1940's. The importance of the absence or presence of the fungus within ryegrass plants was not appreciated until experiments in New Zealand recently showed that plants without this endophyte were highly susceptible to Argentine Stem Weevil, while those containing the fungus were highly resistant.

Dr. Funk reported the results of his research on insect resistance at Rutgers over the last 2 years at a Forage and Turfgrass Endophyte Workshop held in Oregon on May 3 and 4. His results were similar to those reported from New Zealand, but the insects involved were bill bugs and sod webworm in New Jersey turf. Those varieties which had a high percentage of plants containing the endophyte showed excellent insect resistance while those with no endophyte were highly susceptible. At this same conference he reported the recent analysis of seed lots of ryegrasses placed in the 1982 National Ryegrass Test by Dr. Phil Halisky. Citation II (tested as 282) had high levels of the endophyte in seed, while Birdie II (tested as 2ED) was found to have moderately high levels. These two varieties should show improved resistance to the above insects if the endophyte levels are maintained in each seed generation.

It was reported at this same conference that this organism is most likely spread only by means of seed transmission. The fungus is carried along as mycelium near the embryo of each seed. This mycelium grows into resulting seedlings and invades all above ground plant parts and the next generation of seed. When seed is stored the fungus can lose viability rather quickly depending on storage conditions. It appears the percentage of seeds containing the viable endophyte goes down quite rapidly after one year of storage, but detailed information on storage losses is not yet available. What this means is that we will have to start new generations of Breeders and Foundation seed much more often in order to assure the presence of the fungus in certified seed fields if insect resistance is desired. Refrigeration of seed stock lots showed aid in maintaining the viability of this fungus in seed. Once the fungus is transmitted from the seed to the plant tissues growing on a fairway or tee it appears that it will remain in the plant, helping to convey insect resistance until a golfer ends its life as a large divot.

The discovery of this E.T. in ryegrass and its association with insect resistance is certainly the topic of the day. Whether this same organism is conveying insect resistance in other cool season grasses is yet to be proven.

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Recently Bill Small, Dr. Fickle and I visited arsenical turf plots with Dr. Daniel and Dr. Freeborg at the Elks Country Club in Lafayette, Indiana and with Jim Brandt of Danville Country Club. We observed favorable *Poa annua* restriction with tri-calcium arsenate flowable. Several superintendents are testing this new formulation.

I almost forgot to mention the evening at Silver Lake Country Club recently. Several superintendents forgot they were old men.

Our research staff and I spent a day with Dr. Shurtleff, Dr. Wehner and Dr. Wilkenson, reviewing their current studies. You superintendents in Illinois are fortunate to have such a fine staff to aid with your problems. With research help and the rugged individualism of Warren Bidwell's famous words, "Leave the driving to us," turfgrass management in Illinois is in good hands.

Arthur Clesen Inc.

CHEMICALS—aquatic, fungicide, herbicide & insecticide

DECORATIVE MULCHES—chunk bark & shredded mulches, bag or bulk

FERTILIZERS—Country Club, Vertagreen, spray applied, minor elements & bulk blends

GRASS SEED—improved varieties, custom mixes, prairie grass & wild flowers

HAND TOOLS—loppers, pruners, rakes, saws & shovels

HOSE—hose, accessories & reels

HYDRO MULCH/SOIL STABILIZERS

ICE MELT

OIL ABSORBENTS

PAINT—Easy Marker & Tree Kote

SOIL CONDITIONERS—gypsum, lime, peat moss, perlite, sulfur & terra green

SPRAYERS—Myers, Solo, Universeal & Wheel Spray

SPREADERS—Cyclone, Diadem & Lely