



## BACTERIAL WILT WHY DID IT HAVE TO HAPPEN TO ME?

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I have asked myself this question many times in the past two month period. Never in my 20 years of golf turf experience have I been faced with such an uncontrollable and frustrating situation as the C-15 Bacterial Wilt on putting greens.

As a superintendent you ask yourself all the obvious questions - what did I do wrong? - how could I have prevented it? - why didn't I notice it sooner? - and the last one, why did it have to happen to me? Then, after you answer all of these, others pop into your mind like - will the membership understand? - will we lose members because of these problems? - will I still have a job in 3 months?, etc., etc. And believe me the questions just keep on surfacing.

After completing two seasons as Golf Course Superintendent here at Hazeltine, we went into the 84/85 winter in very good condition. I had no physical symptom indicators that the bacterium, *Xanthomonas Campestris*, was already slightly weakening the Toronto C-15 host population. So we came through the winter in an extra weakened state on several greens in particular, all of which have been historically problem winter survival greens anyway. I first became skeptical of possibly more serious problems with certain greens in mid-May. At that time I had numerous local superintendents in from time to time just to bounce ideas and perhaps gain more insight as to what I could do to accelerate the growth of some of my worst weakened turf on greens. By mid-June, after several aerations, switching fungicides, and generally much extra care, I made the diagnosis as C-15 Decline and sent several turf samples to

Dr. Dave Roberts and Dr. Joe Vargus of Michigan State University. At the same time Dr. Phil Larson from the University of Minnesota also was evaluating more turf samples. By July 2nd, Michigan State positively identified the bacterium and by July 9th the University of Minnesota had also confirmed the same diagnosis.

I let my Green Chairman, Mr. Reed Mackenzie, know of this potential problem on Saturday, June 29th. Only July 5th, we went public at the Executive Board level and by July 6th, had a full membership letter out to everyone explaining the disease.

As most of you probably are aware, this bacterial is only specific to C-15 stolons used from Warren Turf Nurseries. To date some 65 golf courses have succumbed to the disease in the states of Illinois, Indiana, Ohio, Kentucky, Kansas, Wisconsin, Michigan and now Minnesota. There is no treatment available to cure this disease, oxytetracycline will only manage it for a short period of time. With this in mind, there were only two options to really discuss for correcting the problem: 1) Fumigate and seed to Penncross. 2) Fumigate and sod to Penncross.

All other options discussed were only versions of the above.

After much deliberation, several board meetings and one full membership meeting on July 17th, Hazeltine made the decision to go through the sodding process as opposed to seeding. From a membership standpoint this would keep the golf course out of service for the shortest period of time possible. It was also decided that the course would remain open through the third week of September. At that time we would begin playing temporaries and embark on the first phase of the renovation process.

My staff will be responsible for stripping sod, aerations, core removal, installation of soil mixes, installation of some drainage, maintaining existing contour surfaces before and after constructing, preparation for methylbromide treatment, and sharing in half the labor of actually laying the sod, rolling, etc.

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medallion, mowing and properly staking O.B. stakes as well as direct and lateral water hazards stakes, changing water in the ball washers, new towels, making sure all bunkers have rakes and trees mowed around. These are many things I know we should do on a regular basis but like I've said sometimes end up on the back burner. Having the M.G.A. staff, Warren, Ross and Guy, there to ensure a properly run tournament will guarantee a successful tournament which it was. Even the weather cooperated. So if your club is ever asked to host an M.G.A. Junior or any other event, don't say no if at all possible. It is a great experience plus doing our part to enhance Minnesota golf.

I'd like to thank the following HOLE NOTE contributors, Doug Mahal, Interlachen Country Club; Ransome Corp. and John Nylund Braemar Golf Club; and to Tom Haugen, Brayton Chemicals for providing one of our speakers and to Kent Kromer, Kromer Company for our other speaker. It really makes for an enjoyable day and we all can learn something.

Don't forget our September 9 member-guest

scramble tournament at Hazeltine National Golf Club, Chris Hague, host, and October 7 meeting at Golden Valley Country Club, Mike Olson, host. Don Lindblad is requesting the 2nd call for names for election of new directors. Please call Don at Majestic Oaks. He usually isn't doing much this time of year so call him with your name. See you at Hazeltine National.

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If all goes well sodding should begin in mid-April and end within 30 days. It is our objective to have 9 greens playable by June 1 and the second 9 holes available by June 15.

Overall the process has been very interesting and rewarding. As a Green Committee our number one concern was to get the support of the membership and help everyone understand that Hazeltine, as many others, is faced with a very uncontrollable situation that would take some extreme measures to correct. This we feel has been accomplished.

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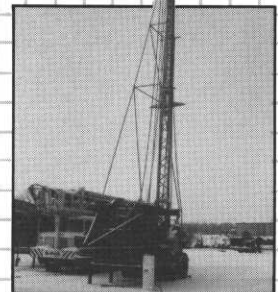
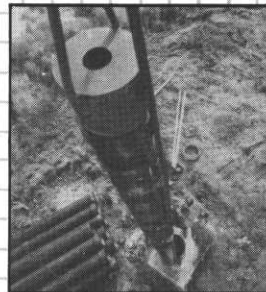
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