RED RUN GOLF CLUB SUMMARY OF EXPERIENCE WITH MICRODOCHIUM Gary Thommes, CGCS Red Run Golf Course Rochester, MI

History: Red Run Golf Club is a charter member of the Golf Association of Michigan being constructed in the year 1914 by famed British Open winner Willie Park Jr. of Scotland. The golf course is generally flat in nature and sits partly on old farm land with dark heavy soils with the remainder of the course over a drain basin for Oakland County which generally has poor air circulation and higher moisture contents.

The greens are the "push-up" variety with heavy soils underneath. We have been on an avid sand topdressing program that has produced approximately a 4 inch sand layer over the native soils. The turf is composed of nearly 100% *Poa annua* with spotty areas of old "Washington" bentgrass.

The fungicide program at Red Run is somewhat unique in the respect that this golf course has had a lot of repetitive programs in the past which has produced resistance to several widely used fungicides. The major resitance we have is to dollar spot. Not only to the benzimidazoles but we also have limited control (short-ened length of control) when using dicarboximides. We rely mainly on multi-site fungicides for the control of dollar spot and some single-site fungicides for anthracnose and summer patch.

The fungicide program for the Spring at Red Run is composed of multi-site fungicides through the months of April and May and then DMI fungicides for the control of summer patch beginning around the first of June pending on soil temperatures. The application of the needed fungicides for the control of microdochium is typically done on weather conditions and the prevalence of activity on the greens. This last year the program on the greens were as follows:

April 18 - 4.5 ounces / M of mancozeb (Fore)
May 2 - 8.0 ounces / M of mancozeb (Fore)
May 16 - 8.0 ounces / M of mancozeb (Fore)
May 29 - 2.5 ounces / M of Bayleton (DMI)

Observations: The day of the application of the Bayleton on the greens the presence of microdochium was somewhat active and the thought that the Bayleton would check it proved to be a grave mistake. A very important observation is that when your *Poa annua* is peaking or near peaking in seed head production, it will help mask or hide the real presence of the disease. If you spread apart the turf with your fingers to expose the leaf blades you will find that the presence of fungus may be *much* higher then first appears on the surface.

The forecast for the following day, May 30 was a high in the mid 50's with considerable cloudiness and possible rain. The following day forecast for May 31 was a high in the lower 70's with abundant sunshine as a high pressure system was working across the Midwest. We all know that sunny skies and dry weather is as good a cure for microdochium as any fungicide. But what followed is not what was forecasted.

A low pressure system in the Ohio Valley backed up into the Detroit area and a misty rain fell all night Saturday and all day Sunday with the temperatures in the lower 50's. This lack of sunshine along with high moisture and cool temperatures provided the ideal, perfect, and most favorable environment for the proliferation of microdochium. The greens on Sunday night showed excessive streaking from the mowers in the morning and the fungus moved throughout the green within a 24 hour period in the likes that I have never seen, We applied fungicides that night at the rate of 9.5 ounces per M of the fungicide Fore in a light misty rain and the following morning the mycelium was still active. Additional applications were made and the fungus was finally checked, but the damage was already done. The entire greens were completely infected with the leaf blades entirely gone. Thankfully the root systems were not affected by the disease.

My Invitational Guest tournament was on June 5th, 6th, and 7th and to say the least, there was not a lot of grass to put on. Sunny skies finally prevailed and with some addditional fertility the greens recovered entirely within a 10 day period.

Lesson learned: Respect this disease. If the conditions are right and you are between fungicide applications and have a high population of *Poa annua* that is cut short (1/8 inch and lower) you can have severe outbreaks. This last Spring brought conditions to the turf that infection was as fast as any including that of pythium under the right conditions. Remember that all weather patterns do change daily and if in doubt, don't think about it, just get out that sprayer and keep this disease in check!