Ounce of fungicide worth a pound of cure

Jim Ellis, grounds superintendent at Lincolnshire Fields Country Club in Champaign, Ill., feels very strongly about turf disease prevention at the 20-year-old course he has worked on since 1977.

Disease prevention on fairways began only five years ago when Ellis and the previous superintendent began overseeding with ryegrass to change the stand composition.

"The main reason," Ellis explains, "was to help combat what was known at that time as Fusarium blight. However, we also found that the ryegrass gave us excellent competition against Poa annua. Because ryegrass is generally vigorous at the same time as the poa, we've been able to hold our own and even decrease the annual bluegrass in some areas."

On the other hand, Ellis has no desire to totally eliminate the original Kentucky bluegrass either. Otherwise, he believes that Pythium blight would take over as a major disease. Hence, he tries to maintain a mixed stand "that will withstand the summers a little better" by overseeding with both species on a regular basis.

"In the past, we were on a treatment program that called for addressing problems as they appeared," Ellis recalls. "In other words, for budgetary reasons, we would do everything agronomically possible to discourage disease, and then treat those areas that became critical. That is, you have healthy grass in the center of a full or partial ring of dead or dying grass, surrounded by more healthy grass. As the disease becomes worse, the rings start running together until you end up with one big mottled area."

Reaching out to research done on his own course in cooperation with the University of Illinois, Ellis adds, "I believe at this point that the primary pathogens are actually working on the roots of the plant. What we are seeing on top may even be other pathogens that are attacking the weak grass plant; and that's when we are seeing the leaf damage. It also explains why you can't get complete control of it with a contact fungicide."

Ellis says that, I mean May or early June before the disease has a chance to become established." He insists it is equally important to select a fungicide that has proven effective against the disease you are going after. "Because of environmental conditions in our part of the country, it is pretty easy to identify them," he says, referring to the northern states. "We typically see necrotic ring spot on Kentucky bluegrass, summer patch on annual bluegrass and take-all patch on creeping bentgrass. However, as you move south, you may also see summer patch on Kentucky bluegrass. This summer we even saw summer patch on ryegrass. So you are never sure what you're dealing with. In most cases, the only way to tell the difference is to plate them out in the laboratory."

Rubigan, however, has been effective in suppressing all five pathogens. Speaking from the experience on his own course, Ellis has to agree. Since the spring of 1986, he has been applying Rubigan as part of a program to prevent disease on tees, greens, approaches and those fairways that have exhibited the frogeye pattern in past years. "The way I see it, no one can expect total control when we're not even sure of the problem," he says. On the patch diseases, Ellis notes that Rubigan is not quite as effective.

"It's not the night and day difference you see when you use it on dollar spot, but you can still see where it has been active," he says. "So everyone's line of thought is that the product does have some control of the problem. However, at this point there are still a lot of questions concerning rates, timing of applications, how deep to water it in and how much the different pathogens are affected by all of the above."