Pythium Prevention

At a recent Greater Washington GCSA meeting at the Country Club of Fairfax Dr. Houston Couch, noted pathologist from V.P.I., told the group of a economical program of pythium prevention that I would like to pass on to all our Mid-Atlantic members.

Dr. Couch advocated a late spring application of ZINEB or PARZATE C at 4oz/M followed by two week intervals of 2oz/M application for the remaining summer months. This old stand-by chemical is still of value for its former uses of alge and helminth control.

Dr. Couch stated the use of Zineb or Parzate C will not prevent all attacks of the multitude of varities of pythium disease; what it will do though is slow the disease down to where SP or Koban can be applied to stop any outbreak of pythium before any serious damage occurs. In that the killing speed of a pythium attack can be devastating we can’t afford to disregard a program. SP and Koban are extremely expensive for general preventative use and Zineb or Parzate C are both reasonably priced fungicides. Dr. Couch did mention we still might consider the use of the more expensive chemicals for a preventative program on any bothersome greens with a past history of pythium outbreaks.

A recent USGA GREENS SECTION bulletin from Holman Griffin, dated June 20, 1975 stated the following:

“Although the weather conditions may not be conductive to outbreaks of pythium spp on your golf course at present we are receiving numerous reports from both lowland and mountain areas of the Mid-Atlantic attesting to the devastating effect of this disease in a very, very short time (loss of 50% of the turf on some putting greens in less than one hour under ideal conditions for the disease’s development, especially with free water present).”

The following is from Kenneth Quant, editor of Verdure, the Chicago land GCSA newsletter.

“A new fungus disease has made its appearance on the Chicago scene and already it appears to be a shoo-in for rookie-of-the-year honors. It is called pythium graminicola and it can be controlled very easily with Tersan SP. (Koban would probably also do the job.)

That sounds easy, but the problem is that pythium graminicola symptoms do not look anything like the symptoms of pythium ultimum, the normal pythium we can expect in this area. In fact, the symptoms look very much like those associated with Red Leafspot. The turf begins to turn yellowish to brownish as if it were starved and begins to thin out rapidly. There is no grease spotting or distinctive mycellium, only a severe thinning of turf. Spraying with any of the leafspot fungicides will only slow the disease down, it will not stop it. So if you think you have Red Leafspot, and you can’t seem to stop it, try some Tersan SP or Koban.”

The problem of identification now adds more complications to living with this disease. The above quote from the Chicagoland Newsletter applies equally here in the Mid-Atlantic area.

I had three greens showing the above symptoms and I applied several leaf spot fungicides to those three greens. After a week of no improvements I applied S.P. after noting the other typical pythium brown patches developing within my collars. All disease stopped immediately! Unfortunately I miss-diagnosed pythium for leaf spot and consequently I’m still plugging out the diseased centers of the stricken greens. These three greens were old poa greens with poor air circulation and very poor drainage — ideal conditions for pythium.

Dr. Couch also advocated picking up all grass clippings from the collars and removal of thatch build-up within the greens, as a mechanical preventative for pythium.