STOP 13

COLD TEMPERATURE BROWN PATCH/YELLOW PATCH

C. L. Brown and J. M. Vargas, Jr.

Sanders et al in 1977 demonstrated pathogenicity of several Rhizoctonia - like fungi isolated from irregular yellow rings and foliar lesions collected in the fall. These fungi were identified as isolates of Rhizoctonia cerealis by Burpee who in 1980 proposed naming the disease yellow patch. These were the first reports of Rhizoctonia cerealis being a pathogen on a turfgrass.

Also known as cold temperature brown patch, it was only recently that this disease was recognized as a serious problem on Kentucky bluegrass lawns in Michigan and the Great Lakes region. Although it has been worked on for several years, very little is still known. There are no known cultural or chemical preventative or curative recommendations.

The disease has been reported to occur when there is moisture and the temperatures are between 50 and 75°F. The symptoms are chlorotic rings or patches that range in size from a few inches to more than a foot. Characteristic lesions can be found on the foliage. Frog-eyes similar to those found with Fusarium blight are common and for this reason diagnosis cannot be based on symptoms alone. One must consider the time of year symptoms appear and confirm presence of the pathogen.

Isolates of Rhizoctonia species have been collected over the last year and work is to be done studying the growth, infection and pathogenicity of these fungi. Inoculations will be done at varying environmental conditions to determine under what conditions infection occurs. Fungicide bioassays have also been done. In the spring of 1982 at the Hancock Center an outbreak occurred from which a species of Rhizoctonia was isolated. Fungicide and fertility plots have been set down.