The role of Gaeumannomyces in decline of kikuyugrass in California. (C05-stowell004629-Oral)

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Abstract:

Kikuyugrass (Pennisetum clandestinum) is an invasive weed in landscapes throughout Southern California. When intensively managed, kikuyugrass provides a good quality golf fairway playing surface. In recent years, the management of kikuyugrass fairways has intensified and mowing heights have been decreased to 1.3 cm. The added stress of lower mowing and increased vertical mowing has resulted in the development of a decline disorder that is associated with the fungus Gaeumannomyces graminis var. graminis (Ggg). Suppression of a Gaeumannomyces disease of bentgrass has been reported following exogenous manganese applications (Hill et.al. 1999 HortScience 34:891-892). In areas where the kikyuygrass decline occurs, the manganese availability index (MnAI) of the soils range between 20 and 70. The MnAI of the soil from fairways where symptoms of the disease are not evident, average 110. The symptoms of kikuyugrass decline, the potential role of Ggg as the causal agent of the disease, and the results of a replicated small-plot trial conducted at Hillcrest Country Club were Granusol Mn (0, 112, and 224 kg/ha, 31% Mn) was applied to a soil with an average MnAI of 56 will be discussed.

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