with 85-90% sand this size fraction has been largely ignored in previous studies on LDS, but since this is the most chemically reactive fraction, due to the presence of clays, it would not be surprising that this is where organic-inorganic interactions would be the most prevalent. The hydrophobicity was the greatest in the area immediately below the thatch-soil interface. This is the area in the soil profile with the most biological activity, especially in regards to root colonization and thatch degradation. Electron micrographs of soil particles that were approximately 0.1mm in diameter showed that the particles in LDS samples had an extensive organic coating compared to particles from wettable soils.

Roots from both areas in the sand greens were heavily colonized by several fungi including vesicular-arbuscular mycorrhizae (M), Phialophora spp., Pythium spp., and Phymox graminis. The VAM appeared to be more extensive in the roots associated with wettable areas, but definitive conclusions should be avoided since the soil was already exhibiting LDS when the samples were collected and so a cause and effect relationship could not be determined. No attempt was made to rate the colonization by the other fungi, they were just observed in roots from both areas.

Results from these studies indicate the role of the bentgrass root system, And associated microflora, on the development of LDS should be investigated in more detail. Previous studies have attempted to characterize the chemical and physical properties of LDS soils, but the impact of biological influences on its development cannot be ignored.

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