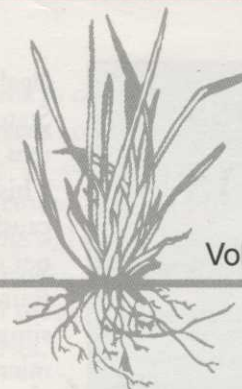


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Surface Algae on Golf Course Putting Greens and Tees

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Algae occur in nearly all terrestrial environments on earth, even Antarctica, so it should not be surprising that they are part of the soil microflora on golf courses. A study conducted 20 years ago in the Houston area correlated algal populations and diversity with land usage. The largest populations of algae were associated with a golf course (disturbed/fertilized site) as compared to a woods or a disturbed/unfertilized site in the same area.

As with any naturally occurring group of organisms, algae have the potential to become problems, especially when environmental conditions favor growth of the algae over the turfgrass. Florida's normal rainfall of 60-65 inches, most during the summer, creates such an environment. However, algae is not limited to Florida, since human intervention can create a favorable environment in any climate. In this article, only surface algal problems will be discussed.

Source of Algae

Terrestrial algae are the algae that live in soil and are often referred to as edaphic algae. In general, terrestrial algal species are different from aquatic

Algal Growth Requirements

Conditions that favor surface algal growth are:

- 1) excessive moisture,
- 2) soil surface exposure to sunlight,
- 3) adequate nutrients.

Excessive moisture can be due to rainfall or irrigation. It can also be related to shady areas where the surface remains excessively wet, even under normal rainfall or irrigation patterns. Shade combined with excessive moisture is probably the primary cause of surface algae. Shade does not have to be in the form of trees. A cloudy day results in the entire green being shaded.

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