A root rot fungus is causing extensive damage on St. Augustinegrass (*Stenotaphrum secundatum*) according to Dr. Phil Colbaugh of the Texas Agricultural Experiment Station in Dallas. The damage to St. Augustinegrass lawns extends from Texas eastward along the Gulf Coast. Recent diagnoses also have been made in Arizona and California. The disease is caused by *Gaeumannomyces graminis* var. *graminis*, with the initial symptoms being a yellowish chlorosis of the leaves and a root system that is basically dead. The lawns typically thin and eventually the turf may die in large irregular patches. Dr. Colbaugh is finding that good control can be obtained for this root rot problem by a combination spray of thiophanate-ethyl (Cleary's 3336®) plus mancozeb (FORE®) at a 4 ounce (113 g) rate. The use of TeeJet 8004 nozzles to increase the spray volume to 2 to 4 gallons (7.6-15.1 L) of spray has proven beneficial.

Unfortunately, I never was given the opportunity to review the actual documents on which these conclusions were drawn.

In an attempt to eliminate these serious urban pollution and human health problems, the Chinese governments in these major urban centers have embarked on a major program to revegetate the open spaces by planting turfgrasses in parks, on sports-recreation areas, along roadsides, and around major government facilities. Even the famous Tiananmen Square now has distinct turfed lawn areas.

- This series of historical events ranging between the extremes of bare dirt versus the use of turfgrass emphasizes the important values of turfgrasses not only from an aesthetic standpoint, but also from the beneficial effects in reducing air pollution, protecting human health, and enhancing the quality-of-life in densely populated urban areas.
- This experience also emphasizes the impact that the presence of turfgrasses have on the environment and on the human population.

**Turfgrass Root Basics**

*Continued from page 5*

- **Thatch**—cultural practices should be adjusted to avoid an excessive thatch accumulation of dead organic matter. An excessive thatch causes the roots to remain in the thatch layer rather than growing into the underlying soil root zone; thus, resulting in increased proneness to disease, insect, drought, heat, and cold stresses.
- **Preemergence herbicides**—a number of preemergence herbicides exhibit varying degrees of toxicity to turfgrass roots, even though there are no direct visible effects to the aboveground shoots. Thus, such preemergence herbicides should only be used as needed to correct a serious developing weed problem.
- **Insects, nematodes, and diseases**—wherever there is a developing pest problem that may cause extensive loss of the root system and allied turf, it is important to implement the appropriate pesticide application that is targeted specifically for the individual problem.