Diplodia Tip Blight of Pines

Browning and death of branch tips is quite common in older, mature pine plantings. Such damage is often due to Diplodia Tip Blight. Infection kills current-year shoots as they emerge from the bud, and may kill whole branches if disease pressure is high during extended spring rainy periods such as occurred in 2007. The causal fungus becomes increasingly more common and destructive as trees age, although young trees can be affected. Austrian pine is the most severely affected of the pines, but Ponderosa pine, Scotch pine and Mugo pine are also susceptible.

The most conspicuous symptoms of Diplodia tip blight are stunted new shoots with short, brown needles still partially encased in their sheath. Infected shoots are quickly killed and may be located throughout the entire tree, although damage is generally first evident in the lower branches. The severity of damage may vary considerably throughout the tree, with some branches that have been infected several years in a row dying back completely. After two or three successive years of infection, treetops may also be extensively damaged. Repeated infections reduce growth, deform trees and ultimately kill them. Diplodia tip blight can be confused with damage caused by pine tip moths; however, pine tip moth damage can be distinguished by the presence of larvae or tunnels within the affected shoot.

Extremely wet spring weather promotes the development of this disease. Fungus spores are dispersed primarily on rain splash from March to October. High humidity also promotes the germination of spores. New shoots are most susceptible during a two-week period starting when the buds begin to open and continue to be susceptible through mid-June. Two applications of fungicide applied during this period are recommended. In eastern Nebraska, an application made during bud break, usually around the third week in April, and a second application 10-14 days later provides optimum control. Applications made after mid May are ineffective. Bordeaux mixture, liquid copper (Tenn-Cop 5E) or fixed copper (Basic copper sulfate, Tribasic copper sulfate) are effective in treating this disease. Read and follow all label directions carefully before application.