

# DIPLODIA TIP BLIGHT DISEASE



## WHAT IS THE THREAT:

Tip browning of pines is symptomatic of Diplodia tip blight (*Diplodia pinea*, syn. *Sphaeropsis sapinea*), a fungal disease. Most affected are Austrian pine (*Pinus nigra*) and Ponderosa pine (*P. ponderosa*), and to a lesser degree, Scots pine (*P. sylvestris*) and Mugo pine (*P. mugo*). Diplodia tip blight primarily affects established landscape trees, generally 30 years or older (Ziems, 2008). Untreated, repeat infections can spread from needle fascicles to the entire tree branch, and ultimately result in tree death. It kills branches by causing cankers and infects the vascular tissue with blue stain. Environmental stresses such as storm damage (wind, ice, hail) and moisture are factors that predispose the tree to infection.

## WHERE IS THE THREAT:

It is common to find Diplodia tip blight on Austrian, Ponderosa, Mugo, and Scots pines. Typically you will see it in pines in the Northeast and Midwest, but can be found throughout North America.

## SYMPTOMS:

Tip browning in needle bundles, which can spread to the entire branch; dying of branches, can result in tree death.

## WHAT TO DO ABOUT IT:

We recommend treating susceptible trees with Propizol® Fungicide (injection) in the late fall, when resin flow is reduced to aid the uptake of injected Propizol. Use the closer (4 inch) spacing to expedite the application.



*Diseased needle fascicles in Austrian Pine, prior to Propizol treatment*



*New, healthy green needle fascicles, post Propizol treatment*



*Diplodia Tip Blights on Ponderosa Pine*



*Green, healthy; treatment recommended.*



*Early infection, some tip browning; treatment recommended.*



*Late infection stage, more than 50% of foliage browned; treatment not recommended.*

Header Image: Joe Docola, Arborjet Inc., Needles: Joe Docola, Arborjet Inc., Ponderosa Pine: Chris Schnepf, University of Idaho, Bugwood.org, Damage Examples: Joe Docola, Arborjet Inc.