

**DIPLODIA TIP BLIGHT OF PONDEROSA PINE SEEDLINGS
AT THE FANTASY FARMS NURSERY, PECK, IDAHO
1986 UPDATE**

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August 1986

Diplodia tip blight of ponderosa pine (Pinus ponderosa Laws.) seedlings has been a recurring problem at the Fantasy Farms Nursery near Peck, Idaho. Cause of the disease was identified in 1984 as Sphaeropsis sapinea (Fr.) Dyko & Sutton (= Diplodia pinea (Desm.) Kickx.) (James 1984b). This fungus often causes branch tip dieback of older pine trees (Peterson 1981) and is a common pathogen of pine seedlings in nurseries (Crandall 1938; James 1985; Palmer et al. 1986).

During 1986 the disease was common on 1-0 bareroot pine seedlings in the northeast portion of the nursery. Damage appeared scattered throughout seedbeds (figure 1) and losses were higher in certain seedlots, probably indicating different levels of susceptibility.

Disease symptoms did not appear until early July; however, infection probably occurred in early spring during prolonged wet periods (James 1984b). Inoculum probably came from nearby large ponderosa pine; the fungus readily sporulates on cone scales and releases spores during periods of cool, wet weather (James 1984a).

Applications of chlorothalonil (Bravo®) will help reduce losses, although onset of warm, dry weather should limit further spread of the disease. It is recommended that ponderosa pine seedlings be planted in portions of the nursery that are as far away from large pine trees as possible. This will reduce the probability of inoculum reaching susceptible seedlings.

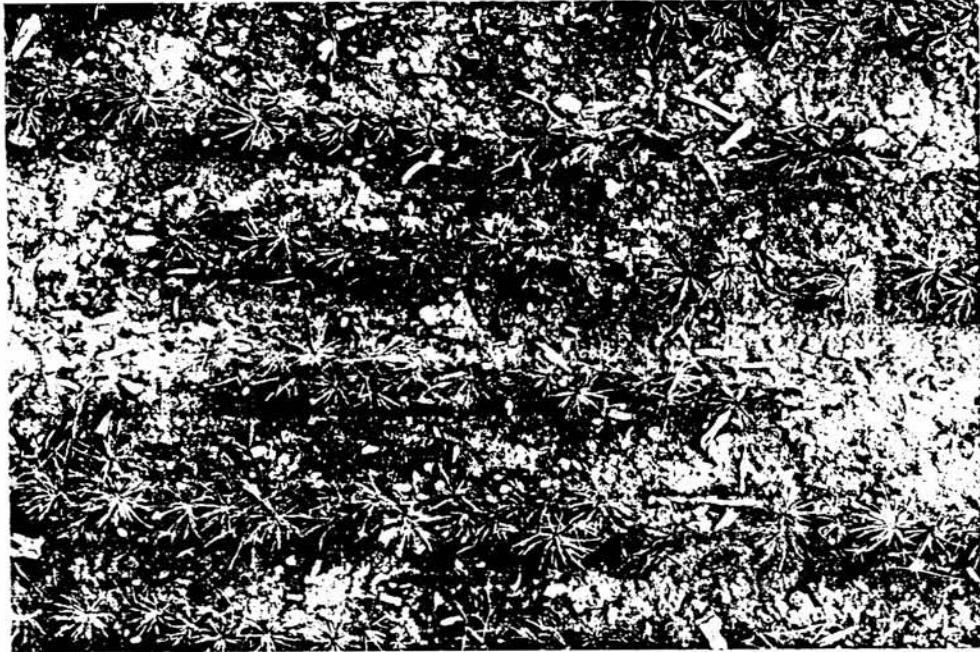


Figure 1.--1-0 bareroot ponderosa pine seedlings with Diplodia tip blight at the Fantasy Farms Nursery, Peck, Idaho.

LITERATURE CITED

- Crandall, B. S. 1938. A root and collar disease of pine seedlings caused by Sphaeropsis ellisii. *Phytopathology* 28:227-229.
- James, R. L. 1984a. Characteristics of Diplodia pinea associated with tip dieback of ponderosa pine seedlings. USDA Forest Service, Northern Region. 5 p.
- James, R. L. 1984b. Tip blight of ponderosa pine seedlings at the Fantasy Farms Nursery, Peck, Idaho. USDA Forest Service, Northern Region. Rept. 84-3. 7 p.
- James, R. L. 1985. Diplodia tip blight of 1-0 ponderosa pine seedlings at the USDA Forest Service Nursery, Coeur d'Alene, Idaho. USDA Forest Service, Northern Region. 3 p.
- Palmer, M. A., T. H. Nicholls, and C. F. Croghan. 1986. Fungicidal control of shoot blight caused by Sphaeropsis sapinea on red pine nursery seedlings. *Plant Disease* 70:194-196.
- Peterson, G. W. 1981. Diplodia blight of pines. USDA Forest Service, For. Insect & Dis. Leaflet 161. 7 p.