FACT SHEET

Armillaria Root Rot

A Fungal Disease Causing Decay and Death

Armillaria is a root rotting fungus. Most tree diseases affect only one type of tree. Armillaria kills almost any kind of tree. There are multiple species of this fungus, ranging from mild to aggressive. Infected trees need altered environmental conditions Armillaria takes advantage of injuries to the root system and attacks weakened or stressed trees. Trees suffering construction damage are a common target. Severed roots, compacted soil and changes to the level of soil over the roots all provide opportunities for Armillaria to invade a tree.

What to Look For

- Patches of loose bark falling away from the lower trunk.
- White, fan-shaped growths underneath bark.
- Black shoestring structures on the trunk where bark has fallen away.
- Clusters of honey-colored mushrooms at the base of the tree in autumn.
- Large limbs dying off in the upper part of the tree.

Life Cycle

- Mushrooms are present in late August through October.
- Spores are distributed by the wind to exposed wood or injured bark.
- Spores infect the bark and cells that create new tree tissue.
- The fungus may live for decades on its host plant and in the soil nearby on decaying wood.

Treatment and Prevention

- Armillaria is not directly treatable with any labeled fungicide. Prevention is the best option.
- Reduce moisture and soil compaction around the tree.
  - Do not add soil over the normal level of a tree's root system.
  - Don't crowd the base of the trunk with plants; leave the trunk exposed to air.
  - Irrigate properly; keep the upper roots and crown area as dry as possible.
- Some infected trees can benefit from treatment with our root care service.
  - Increases population of competitive soil organisms.
  - Increases root growth and tissue resistance.
  - Increases soil porosity and decreases soil moisture.

Black shoestring structures appear at advanced stages of infection.

Armillaria Shoestrings.

Armillaria Fruiting Bodies.