

Armillaria root rot

Armillaria mellea, *A. ostoyae* (fungi)

Armillaria root rot is rare on blueberries in the United States, but can cause serious damage where it occurs.

Symptoms. Infected plants are low in vigor and may appear to be suffering from a nutrient deficiency. Leaves are small and chlorotic, and branches wilt suddenly.

Plants decline slowly over several years or die within a short time. White mycelial fans are present between the bark and the hardwood at or slightly below the soil line. Black shoestring-like strands (rhizomorphs) may be attached to the roots or trunk or growing freely in the soil. Yellowish brown mushrooms (honey mushrooms) are sometimes produced in clumps at the base of the bush.



Black, string-like rhizomorphs on infected blueberry crown.

Disease cycle. The fungus attacks more than 500 species of woody plants. The disease is most likely to occur on a sandy, well-drained site where an oak forest was cleared. *Armillaria* survives as mycelium and rhizomorphs on old roots and stumps.



Bush decline due to *Armillaria* root rot.

The fungus spreads between bushes by root-to-root contact and can also survive on wood chip mulches. Spores disseminated from the mushrooms probably are not important in spread.

Management. Disk soil thoroughly if forest (particularly oak) was present at the site and remove as many root fragments as possible; leave the area fallow for at least 3 years; fumigate soil before planting (however, fumigants do not penetrate deeper than 50 cm); remove and burn infected bushes; remove wood chip mulch.