

- Apply liquid lime-sulfur (2 cups per gallon of water) in the late winter while the tree is still dormant.

- Beginning at the green tip stage, apply Captan at 14- to 21-day intervals

until harvest. Follow all of the manufacturer's label directions and precautions. These summer sprays protect against new infections.



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This publication prepared by Jeff Michels, Graduate Assistant; Ed Sikora, *Extension Plant Pathologist*, Associate Professor; and William Gazaway, *Extension Plant Pathologist*, Professor, all in Plant Pathology at Auburn University.

Use pesticides **only** according to the directions on the label. Follow all directions, precautions, and restrictions that are listed. Do not use pesticides on plants that are not listed on the label.

The pesticide rates in this publication are recommended **only** if they are registered with the Environmental Protection Agency and the Alabama Department of Agriculture and Industries. If a registration is changed or cancelled, the rate listed here is no longer recommended. Before you apply any pesticide, check with your county Extension agent for the latest information.

Trade names are used **only** to give specific information. The Alabama Cooperative Extension System does not endorse or guarantee any product and does not recommend one product instead of another that might be similar.

For more information, call your county Extension office. Look in your telephone directory under your county's name to find the number.

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ALABAMA A&M AND AUBURN UNIVERSITIES

Plant Disease Notes

Black Knot On Plum And Cherry Trees

Black knot, caused by the fungus *Dibotryon morbosum*, is a common disease of plum and cherry trees throughout the United States. The fungus attacks twigs and branches forming large, cylindrical, black swellings. The disease becomes more severe on infected trees each growing season and will eventually kill the tree unless effective control measures are used.

Symptoms. The disease first appears in the fall as small, olive-green swellings on twigs, fruit spurs, and branches. In the spring, the swellings turn light brown and rupture as they enlarge. In May or June, elongated swellings become larger and more gall-like. Young gall surfaces have a pulpy texture and are covered with a velvety, olive-green fungal growth. During the summer, the knots or galls turn darker in color and continue to expand. By the following fall, the galls turn dark black and harden-off. Knots continue to expand each year resulting in galls that can be as large as a foot long and over an inch thick.

Persistence And Transmission. Spores of the fungus develop on the surface of black knot galls in the spring. Spores are spread by wind or rain to other trees in and around the orchard or can reinfect new locations on the same tree. Trees are most vulnerable during bloom. Symptoms from

spring infections first are seen as small swellings in the twigs in the fall.

Additional spores are produced and discharged from the velvety green surface of young galls later in the spring and early summer. These are called secondary spores or "summer spores." The summer spores cause additional gall formation on young twigs and branches. The fungus will survive in an infected tree for as long as that tree lives.

Control. Black knot is best controlled by using the following strategies:

- Remove knots (galls) as soon as they appear. Prune out knots with sterile pruning shears or a knife 4 to 6 inches below the swelling. The pruning shears should be dipped in hypochlorite solution (1 part household bleach to 9 parts water) between cuts.
- Remove and burn badly diseased trees to prevent infection of healthy trees. Knots present on branches that have been removed can still serve as a source of infection if they are not destroyed.
- Destroy wild plum and cherry trees in the vicinity that may harbor the disease and act as a source of disease inoculum.

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