

Plant Diseases

Black Knot of Plum and Cherry

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Black knot is common disease of plum, prune and cherry. Both cultivated and wild species of these plants are susceptible to this disease. Trees severely infected with black knot become an eyesore and are almost worthless as an ornamental plant after several years. This is particularly true in small home orchards or yards, where no control measures are attempted.

The first indication of the presence of black knot is usually the swelling of small twigs. As the disease spreads, elongated swollen areas appear on older limbs. These knots are greenish and relatively soft in texture when they first appear. Usually the knots occur on only one side of the limb, but it is not uncommon for the knots to girdle the entire limb. As the growing season progresses, the knots become coal black and very hard. These knots may range in size from a few inches in length to more than a foot long. At this stage, the disease is very conspicuous.

Black knot is caused by the fungus, *Apiosporina morbosa*. Infection may occur through wounds or through unwounded succulent young twigs in early spring. Swelling of the limbs usually does not appear, however, until late fall or the following spring. The fungus, living in these black knots, produces spores that are discharged and spread to other limbs and germinate to produce new infections.



Control

Several things can be done to control black knot:

- 1) Buy disease-free trees from a reputable nursery. Never accept trees with swollen branches or knots.
- 2) All knots should be removed from infected trees during the winter. Knots remaining on the tree will only serve as a source for new infections. Prune knots on small limbs 3 to 4 inches below the knot. Pruning may be needed in the early spring to remove small knots missed in the winter. Knots on larger limbs can be removed by cutting away the knot without removing the limb. The cuts should extend 2 to 3 inches back into the healthy wood on either side of the knot. Removal of knots in this manner is best accomplished during the summer.

- Wound paint can be used to dress the cut surfaces, but is not necessary. Care must be taken to remove and destroy all pruned knots. Wild plum and cherry trees in the infected area should be destroyed if practical. Neighbors also need to follow this control program if it is to be a success.
- 3) A tree badly infected with black knot should receive a spray of lime-sulfur before or shortly after bud swell in the spring. A summer fungicidal spray program will also help control black knot. Apply Cleary's 3336 F or Domain FL at two teaspoons per one gallon of water, **plus** 4 teaspoons of Captan 50WP at bud swell. Repeat this application at early bloom, at full bloom and two to three weeks later.

Precautionary Statement

To protect people and the environment, pesticides should be used safely. This is everyone's responsibility, especially the user. Read and follow label directions carefully before you buy, mix, apply, store, or dispose of a pesticide. According to laws regulating pesticides, they must be used only as directed by the label.

Disclaimer Statement

Pesticides recommended in this publication were registered for the prescribed uses when printed. Pesticide registrations are continuously being reviewed. Should registration of a recommended pesticide be cancelled, it would no longer be recommended by The University of Tennessee.

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