

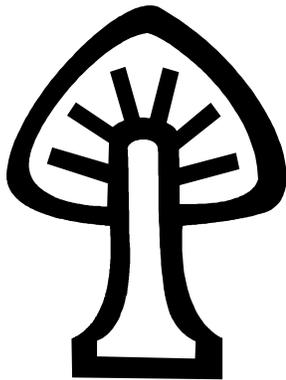


About Black Knot

Black knot is a fungal disease that affects the *Prunus* species only. *Prunus* species include Mayday, chokecherries and cherries. The fungus that causes black knot produces spores that can be wind-blown or rain-splashed from knots to the branches of healthy trees.

The first visible symptoms are small brown swellings on newer growth. Knots can expand over the seasons reaching sizes upwards of 15 cm long. In autumn the knots turn black and become hard. Symptoms are easiest to see in late fall and early winter once the leaves have dropped from trees.

Black knot is often overlooked because an infected tree will live until it is severely infested. Black knot can cause die back of branches and even the main trunk if the knot girdles the infected.



Black Knot:

- It is caused by a fungus
- Distinguishing symptom is the black, tar like swellings on branches.
- Removal of infected branches is the best way to control black knot.

Disease Cycle

Winter spores formed in mature black knots are spread by wind and rain to twigs where infection takes place through unwounded tissue. Infection continues to occur until terminal growth stops and it is most severe when conditions are mild and wet. Only several months after initiation of infection do green swellings become visible and usually not until spring. These newly formed knots produce summer spores. The fungus extends several inches beyond the knots and the knots expand with age. Diagram on the back.

Management Strategies



Black knot

Removal of sources of inoculum to prevent population build up. Prune out all knot bearing branches during late fall, winter or very early spring while plants are dormant. Remove infected branches to at least 15 to 20 cm below knot. As a precaution, cutting blades should be cleaned and disinfected after pruning. For knots on scaffold branches or trunks that cannot be easily removed, cut away diseased tissue down to a good wood or at least 1 cm beyond the edge of the knot. Failure to remove branches beyond the internal growth will result in re-growth of the fungus. **Diseased wood must be destroyed immediately** (burned or removed from site). Diseased branches with knots can produce and release spores for up to 4 months after removal.

Looking at your trees on a regular basis to ensure they are healthy and being able to spot problems at early stages.

When selecting trees for new plantings, consider varieties with known resistance. Avoid planting new trees near areas with known problems. Chemical management is not normally recommended and there are few products actually available.

Pruning is the best option for management of black knot.

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Where Opportunity Awaits



Disease cycle of black knot.

