



BLACK KNOT

Dibotryon morbosum

Hosts:

Chokecherry and other *Prunus* species

Distribution and Disease Cycle:

A fungal pathogen causes this widespread and potentially serious disease affecting both wild and cultivated species of chokecherry and other members of the Cherry (*Prunus*) family. The disease disfigures ornamental trees and can reduce fruit yield.

Winter spores formed in mature black knots are spread by wind and rain to nearby twigs where infection takes place through intact (unwounded) tissue. Infection can occur anytime from early spring until terminal growth stops, but is usually most severe when conditions are mild and wet. Symptoms do not usually become evident for several months or until the following spring following initial infection.



Black knot in riparian planting of chokecherry

Photo credit: Jessica Hendryx, Montana State University

Symptoms and signs:

New black knot infections first appear as green swellings that eventually enlarge, develop cracks and turn into the characteristic elongated black swellings on twigs and branches. Usually these swellings occur only on one side of the twig but occasionally branches become completely girdled, killing the portion above the infection. Old black knots may be partially covered by a white to pinkish mold and be riddled with insect holes.

Control:

Prune annually in winter or early spring (prior to Mar. 1), removing swollen areas or knots. Because the fungus can extend several inches beyond the knots, make cuts at least 15 cm below swelling as the fungus typically extends beyond the knot. Severely infected trees should be removed and burned. Burn all prunings before spring, since pruned knots will still produce spores, further spreading the disease. In establishing new plantings and also in helping to control disease in established



Black knot gall and fruiting bodies
Photo credit: Robert L. Anderson, USDA Forest Service, Bugwood.org

plantings, wild chokecherries and plums in the vicinity should be thoroughly cleaned up or removed. At present, there are no registered fungicides for controlling black knot of chokecherry.

For further information please contact:

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