Boxelder

Topical Series plantdiseasehandbook.tamu.edu/landscaping/boxelder/

Acer negundo

Verticillium wilt (fungus – *Verticillium albo-atrium*): This is one of the most common fungal diseases of plants attacking over 300 species. Boxelder is a member of the maple family and this disease is the most important killer of trees in that family. Symptoms include sudden wilting, usually of individual branches, followed by yellowing and finally browning of the foliage. Extensive internal streaking of the outer sapwood. Infected trees should be removed and burned. If a tree is to be saved for as long as possible, prune off all dead and dying branches. Cutting tools should be sterilized with 10 percent bleach between cuts. Inspect the tree periodically for dying branches.

Anthracnose (fungus – *Gloeosporium* sp.): Spots are indefinite, light brown, and may enlarge and run together causing the death of entire leaves. Leaves partially killed appear as if scorched. The disease is more common during prolonged rain periods when it may cause severe defoliation of trees. Several applications of fungicides may be required to control the disease during periods of high humidity.

Leaf Spot (fungi – *Phyllosticta minima, Rhytisma punctatum, Cristulariella pyramidalis*): These fungi attack many species of the maple family (Acer) including boxelder. The following fungi attack only boxelder: Phyllosticta negundinis, Cylindrosporium negundinis, Septoria negundinis, and Cercospora negundinis. Many leaf spots, one-fourth inch or more in diameter, some irregular, some with indefinite margins, occur on boxelder. Spots have brown margins and light colored centers. Some of the spots may develop black bodies, which are the fruiting structures of the fungi. Diseased, fallen leaves should be raked up and burned. Spraying the tree several times at two week intervals may be needed to keep the disease in check.

Powdery Mildew (fungus – *Uncinula circinata*): A white to grayish mold develops on the surface of the leaves. The disease is seldom serious on boxelder.

Heart Rot (fungus – *Fomes* sp.): The fungus enters the trunk generally through wounds or branch stubs resulting from pruning or mechanical damage. The rot is generally found on dead timber, but the fungus can get established on living trees and destroy the heartwood. New conks, or fruiting bodies of the fungus may appear annually, but they are perennial structures, putting on another spore-producing layer each year. Best control is achieved through prevention. Avoid mechanical injuries to trees, such as would result from hitting the trunk with lawn mowers and other garden instruments. Paint wound with a pruning compound; remove and destroy conks. Make pruning cuts flush with the main trunk and do not leave branch stubs.

Crown Gall (bacterium – *Agrobacterium tumefaciens*): (See section on **Crown Gall**)

Cotton Root Rot (fungus – *Phymatotrichum omnivorum*): Boxelder is moderately susceptible to the cotton root rot fungus. (See section on **Cotton Root Rot**)

Herbicide damage: Boxelder is highly susceptible to 2-4-D, causing distortion, dwarfing, and blighting of foliage.